

Corrigendum - 3 dated 14/02/2025 to CPC Tender No. BHEL / CPC / BARH / CHM / 25 / 075

Name of Work: CONSTRUCTION WORK OF 01 NOS 150M HEIGHT RCC SINGLE FLUE CHIMNEY COMPLETE IN ALL RESPECT INCLUDING CHIMNEY RCC WIND SHIELD, FABRICATION & ERECTION OF STEEL FLUE CANS, ERECTION OF SHOP FABRICATED STRUCTURAL PLATFORMS, INSTALLATION OF ELECTRICAL ITEMS IN CONFORMITY WITH THE APPROVED LAYOUT ETC TO COMPLETE THE CHIMNEY IN ALL RESPECT **(BUT EXCLUDING PILING AND BOROSILICATE WORKS)** CHIMNEY UNIT#2 FOR AT BARH SUPER THERMAL POWER PROJECT, STAGE I, BIHAR.

A) Time Extension: Clause No. 1.0 Salient Features of NIT in NOTICE INVITING TENDER is revised as below:

Sl. No.	Clause No.	Existing in Tender	Extended vide Corrigendum-1	Extended vide Corrigendum-2	Revised As
1	Sl. No. v) DUE DATE & TIME OF OFFER SUBMISSION.	Date: 04/02/2025, Time: 10:00 Hrs	Date: 10/02/2025, Time: 10:00 Hrs	Date: 14/02/2025, Time: 10:00 Hrs	Date: 18/02/2025, Time: 10:00 Hrs
2	Sl. No. vi) OPENING OF TENDER	Date: 04/02/2025, Time: 16:30 Hrs	Date: 10/02/2025, Time: 16:30 Hrs	Date: 14/02/2025, Time: 16:30 Hrs	Date: 18/02/2025, Time: 16:30 Hrs

B) Technical Conditions of Contract (TCC): The Following clauses of TCC are revised as below:

Sl. No.	Clause No.	Existing in Tender	Revised As
1	Title of TCC (Page No. 1)	CONSTRUCTION WORK OF 01 NOS 150M HEIGHT RCC SINGLE FLUE CHIMNEY COMPLETE IN ALL RESPECT INCLUDING CHIMNEY RCC WIND SHIELD, FABRICATION & ERECTION OF STEEL FLUE CANS, ERECTION OF SHOP FABRICATED STRUCTURAL PLATFORMS, INSTALLATION OF ELECTRICAL ITEMS IN CONFORMITY WITH THE APPROVED LAYOUT ETC TO COMPLETE THE CHIMNEY IN ALL RESPECT (BUT EXCLUDING PILING AND EXCAVATION WORKS, BOROSILICATE WORKS) CHIMNEY UNIT#2 FOR AT BARH SUPER THERMAL POWER PROJECT, STAGE I, BIHAR	CONSTRUCTION WORK OF 01 NO 150M HEIGHT RCC SINGLE FLUE CHIMNEY COMPLETE IN ALL RESPECT INCLUDING CHIMNEY RCC WIND SHIELD, FABRICATION & ERECTION OF STEEL FLUE CANS, ERECTION OF SHOP FABRICATED STRUCTURAL PLATFORMS, INSTALLATION OF ELECTRICAL ITEMS IN CONFORMITY WITH THE APPROVED LAYOUT ETC TO COMPLETE THE CHIMNEY IN ALL RESPECT (BUT EXCLUDING PILING AND BOROSILICATE WORKS) OF CHIMNEY UNIT#2 FOR BARH SUPER THERMAL POWER PROJECT, STAGE I, BIHAR.
2	Chapter-II : Scope of Work: Clause No. 2.1	The work to be done under this specification comprises of construction work of 01 nos 150M height RCC Single Flue Chimney complete in all respect including Chimney RCC wind shield, fabrication & erection of steel flue cans, erection of shop	The work to be done under this specification comprises of construction work of 01 no. 150M height RCC Single Flue Chimney complete in all respect including Chimney RCC wind shield, fabrication & erection of steel flue cans, erection

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		fabricated structural platforms, installation of electrical items in conformity with the approved layout etc to complete the chimney in all respect but excluding piling and excavation works Chimney Unit#2 for at BARH Super Thermal Power Project, Stage-I, Bihar			of shop fabricated structural platforms, installation of electrical items in conformity with the approved layout etc to complete the chimney in all respect (but excluding piling and borosilicate works) of Chimney Unit#2 for BARH Super Thermal Power Project, Stage-I, Bihar.		
3	Chapter-II : Scope of Work: Clause No. 2.2.1 a	RCC Works for Chimney Raft and Shell (using slip form shuttering) & other misc works.			RCC Works for Chimney Raft and Shell (using slip form shuttering) including excavation & other misc works. (Piling, pile chipping and pile testing shall be under piling agency scope deployed by BHEL)		
4	Chapter-IV : T&PS AND MMES TO BE DEPLOYED BY CONTRACTOR, Table Clause No. 4.1	4.1.1	Hydraulic Excavator /Poclain	As per requirement	4.1.1	Hydraulic Excavator /Poclain	01 No.
		4.1.2	Dumper	As per requirement	4.1.2	Dumper	03 Nos.
		4.1.11	02 Sets of Strand Jacks of required capacity (includes 4 nos. standby Jacks) with 01 nos. power Pack including strand Rope of adequate thickness & length	As per Site requirement (To carryout erection of both flue cans parallel)	4.1.11	Strand Jacks of required capacity (includes 4 nos. standby Jacks) with 01 nos. power Pack including strand Rope of adequate thickness & length	01 Set
		4.1.12	Slip Form Shuttering System & Necessary Spare Parts	02 Set (To carryout erection of both flue cans parallel)	4.1.12	Slip Form Shuttering System & Necessary Spare Parts	01 Set
		4.1.14	Concrete Boom placer min. 35m long of required Capacity	Requirement till erection of winch for concrete	4.1.14	Concrete Boom placer min. 35m long of required Capacity	01 No. Requirement till erection of winch for concrete

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Chapter-VI : TIME SCHEDULE, Clause No. 6.2	6.2	Schedule of Completion: The entire work under the scope of this contract shall be carried out in such a manner that the following listed major milestones are achieved as per completion schedule given against each activity & released for erection by other agency.	
	SI No	Activity	Schedule completion from date of start of work
	6.2.1	Slip-form Assembly and Erection Completion	2nd Months
	6.2.2	Completion of RCC shell & Installation of Temporary Aviation Light. (M1)	7th Months
	6.2.3	Completion of platform beams fabrication and erection	11th Month
	6.2.3	Slipform Dismantling	12 th Months
	6.2.4	Flue Can Fabrication and Erection (M2)	16th Months
	6.2.5	External Painting	19 th Month
	6.2.6	Completion of all Balance Misc. Works like electrical item installation, including erection of elevator etc	20th Months
Chapter-VI : TIME	6.5	Intermediate milestones:	
	6.5.1	Two Major Intermediate Milestones are identified as M1 and M2 above.	

Chapter-VI : TIME SCHEDULE, Clause No. 6.2	6.2	Schedule of Completion: The entire work under the scope of this contract shall be carried out in such a manner that the following listed major milestones are achieved as per completion schedule given against each activity & released for erection by other agency.	
	SI No	Activity	Schedule completion from date of start of work
	6.2.1	Completion of Raft	2nd Month
	6.2.2	Slip-form Assembly and Erection Completion	4th Months
	6.2.3	Completion of RCC shell & Installation of Temporary Aviation Light. (M1)	9th Month
	6.2.4	Completion of platform beams fabrication and erection	12th Month
	6.2.5	Flue Can Fabrication and Erection (M2)	17th Month
	6.2.6	Completion of all Balance Misc. Works like Painting, electrical item installation, including erection of elevator etc	20th Months
Chapter-VI : TIME	6.5	Intermediate milestones:	
	6.5.1	Two Major Intermediate Milestones are identified as M1 and M2 above.	

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SCHEDULE, Clause No. 6.5		Milestones	Activity	Schedule of completion from start of work			Milestones	Activity	Schedule of completion from start of work		
		M1	Completion of RCC shell & Installation of Temporary Aviation Light	7th Months			M1	Completion of RCC shell & Installation of Temporary Aviation Light	9th Months		
		M2	Flue Can Fabrication and Erection	16th Months			M2	Flue Can Fabrication and Erection	17th Months		

C) Notice Inviting Tender (NIT): The Following clauses of NIT are revised as below:

Sl. No.	Clause No.	Existing in Tender	Revised As
1	Title of NIT (Page No. 1)	CONSTRUCTION WORK OF 01 NOS 150M HEIGHT RCC SINGLE FLUE CHIMNEY COMPLETE IN ALL RESPECT INCLUDING CHIMNEY RCC WIND SHIELD, FABRICATION & ERECTION OF STEEL FLUE CANS, ERECTION OF SHOP FABRICATED STRUCTURAL PLATFORMS, INSTALLATION OF ELECTRICAL ITEMS IN CONFORMITY WITH THE APPROVED LAYOUT ETC TO COMPLETE THE CHIMNEY IN ALL RESPECT BUT EXCLUDING PILING AND EXCAVATION WORKS, BOROSILICATE WORKS CHIMNEY UNIT#2 FOR AT BARH SUPER THERMAL POWER PROJECT, STAGE I, BIHAR	CONSTRUCTION WORK OF 01 NO 150M HEIGHT RCC SINGLE FLUE CHIMNEY COMPLETE IN ALL RESPECT INCLUDING CHIMNEY RCC WIND SHIELD, FABRICATION & ERECTION OF STEEL FLUE CANS, ERECTION OF SHOP FABRICATED STRUCTURAL PLATFORMS, INSTALLATION OF ELECTRICAL ITEMS IN CONFORMITY WITH THE APPROVED LAYOUT ETC TO COMPLETE THE CHIMNEY IN ALL RESPECT (BUT EXCLUDING PILING AND BOROSILICATE WORKS) OF CHIMNEY UNIT#2 FOR BARH SUPER THERMAL POWER PROJECT, STAGE I, BIHAR.

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2	1.0 Salient Features of NIT – Sl. No. : ii : BROAD SCOPE OF JOB	CONSTRUCTION WORK OF 01 NOS 150M HEIGHT RCC SINGLE FLUE CHIMNEY COMPLETE IN ALL RESPECT INCLUDING CHIMNEY RCC WIND SHIELD, FABRICATION & ERECTION OF STEEL FLUE CANS, ERECTION OF SHOP FABRICATED STRUCTURAL PLATFORMS, INSTALLATION OF ELECTRICAL ITEMS IN CONFORMITY WITH THE APPROVED LAYOUT ETC TO COMPLETE THE CHIMNEY IN ALL RESPECT BUT EXCLUDING PILING AND EXCAVATION WORKS CHIMNEY UNIT#2 FOR AT BARH SUPER THERMAL POWER PROJECT, STAGE-I, BIHAR, INDIA		CONSTRUCTION WORK OF 01 NO 150M HEIGHT RCC SINGLE FLUE CHIMNEY COMPLETE IN ALL RESPECT INCLUDING CHIMNEY RCC WIND SHIELD, FABRICATION & ERECTION OF STEEL FLUE CANS, ERECTION OF SHOP FABRICATED STRUCTURAL PLATFORMS, INSTALLATION OF ELECTRICAL ITEMS IN CONFORMITY WITH THE APPROVED LAYOUT ETC TO COMPLETE THE CHIMNEY IN ALL RESPECT (BUT EXCLUDING PILING AND BOROSILICATE WORKS) OF CHIMNEY UNIT#2 FOR BARH SUPER THERMAL POWER PROJECT, STAGE I, BIHAR.											
3	ANNEXURE – 1 of NIT - JOB	CONSTRUCTION WORK OF 01 NOS 150M HEIGHT RCC SINGLE FLUE CHIMNEY COMPLETE IN ALL RESPECT INCLUDING CHIMNEY RCC WIND SHIELD, FABRICATION & ERECTION OF STEEL FLUE CANS, ERECTION OF SHOP FABRICATED STRUCTURAL PLATFORMS, INSTALLATION OF ELECTRICAL ITEMS IN CONFORMITY WITH THE APPROVED LAYOUT ETC TO COMPLETE THE CHIMNEY IN ALL RESPECT BUT EXCLUDING PILING AND EXCAVATION WORKS CHIMNEY UNIT#2 FOR AT BARH SUPER THERMAL POWER PROJECT, STAGE-I, BIHAR, INDIA.		CONSTRUCTION WORK OF 01 NOS 150M HEIGHT RCC SINGLE FLUE CHIMNEY COMPLETE IN ALL RESPECT INCLUDING CHIMNEY RCC WIND SHIELD, FABRICATION & ERECTION OF STEEL FLUE CANS, ERECTION OF SHOP FABRICATED STRUCTURAL PLATFORMS, INSTALLATION OF ELECTRICAL ITEMS IN CONFORMITY WITH THE APPROVED LAYOUT ETC TO COMPLETE THE CHIMNEY IN ALL RESPECT (BUT EXCLUDING PILING AND BOROSILICATE WORKS) CHIMNEY UNIT#2 FOR AT BARH SUPER THERMAL POWER PROJECT, STAGE-I, BIHAR.											
4	ANNEXURE – 1 of NIT : Pre-Qualifying Requirements (PQR)	<table><tr><td>B</td><td>Technical: Bidder who wish to participate should have experience as follows:</td><td rowspan="2">Applicable</td></tr><tr><td>B-1</td><td>Bidder should have executed “Piling or Civil or Structure or ‘Civil and Structural Works’ or RCC Chimney or RCC Cooling Tower or RCC Silo or Mill Bunker or any combination of these works” for any one of the following in the last seven years from latest date of bid submission:</td></tr></table>		B	Technical: Bidder who wish to participate should have experience as follows:	Applicable	B-1	Bidder should have executed “Piling or Civil or Structure or ‘Civil and Structural Works’ or RCC Chimney or RCC Cooling Tower or RCC Silo or Mill Bunker or any combination of these works” for any one of the following in the last seven years from latest date of bid submission:	<table><tr><td>B</td><td>Technical: Bidder who wish to participate should have experience as follows:</td><td rowspan="2">Applicable</td></tr><tr><td>B-1</td><td>Bidder should have executed “Piling or Civil or Structure or ‘Civil and Structural Works’ or RCC Chimney or RCC Cooling Tower or RCC Silo or Mill Bunker or any combination of these works” for any one of the following in the last ten years from latest date of bid submission:</td></tr></table>		B	Technical: Bidder who wish to participate should have experience as follows:	Applicable	B-1	Bidder should have executed “Piling or Civil or Structure or ‘Civil and Structural Works’ or RCC Chimney or RCC Cooling Tower or RCC Silo or Mill Bunker or any combination of these works” for any one of the following in the last ten years from latest date of bid submission:
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B	Technical: Bidder who wish to participate should have experience as follows:	Applicable													
B-1	Bidder should have executed “Piling or Civil or Structure or ‘Civil and Structural Works’ or RCC Chimney or RCC Cooling Tower or RCC Silo or Mill Bunker or any combination of these works” for any one of the following in the last ten years from latest date of bid submission:														

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		B-1.1	Executed One (1) work of value not less than Rs. 1600 Lakhs against Single Work Order,		B-1.1	Executed One (1) work of value not less than Rs. 1680 Lakhs against Single Work Order,	
			OR			OR	
		B-1.2	Executed Two (2) works each of value not less than Rs. 1000 Lakhs against maximum two work orders.		B-1.2	Executed Two (2) works each of value not less than Rs. 1050 Lakhs against maximum two work orders.	
			OR			OR	
		B-1.3	Executed Three (3) works each of value not less than Rs. 800 Lakhs against maximum three work orders.		B-1.3	Executed Three (3) works each of value not less than Rs. 840 Lakhs against maximum three work orders.	
		AND			AND		
		B-2	Bidder should have executed the following;	Applicable	B-2	Bidder should have executed the following;	Applicable
		B-2.1	Bidder should have executed atleast one complete “RCC Chimney with Slipform shuttering or NDCT (Natural Draft Cooling Tower) with Jumpform” of at least 100 Mtr height against a single contract in the last seven years from latest date of bid submission.		B-2.1	Bidder should have executed atleast one complete “RCC Chimney with Slipform shuttering or NDCT (Natural Draft Cooling Tower) with Jumpform” of at least 100 Mtr height against a single contract in the last ten years from latest date of bid submission.	
			OR			OR	
		B-2.2 (a)	Bidder should have executed Reinforced Cement Concrete (RCC) of at least 3970 CUM within a period of twelve consecutive months against one running/ completed contract in infrastructure works like road, bridges, etc. or in the area of power, steel, oil & gas, petro-chemical, fertilizer and / or any other process industry.		B-2.2 (a)	Bidder should have executed Reinforced Cement Concrete (RCC) of at least 3970 CUM within a period of twelve consecutive months against one running/ completed contract in infrastructure works like road, bridges, etc. or in the area of power, steel, oil & gas, petro-chemical, fertilizer and / or any other process industry in the last ten years from latest date of bid submission.	
			AND			AND	
		B-2.2 (b)	Bidder should have executed atleast one “RCC Chimney Shell with Slipform shuttering or NDCT Shell (Natural Draft Cooling Tower) with Jumpform” of at least 100 Mtr height against a single contract in the last seven years from latest date of bid submission.		B-2.2 (b)	Bidder should have executed atleast one “RCC Chimney Shell with Slipform shuttering or NDCT Shell (Natural Draft Cooling Tower) with Jumpform” of at least 100 Mtr height against a single contract in the last ten years from latest date of bid submission.	

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		C	Financial:		C	Financial:	
		C-1	TURNOVER: Bidders must have achieved an average annual financial turnover (Audited) of Rs. 600 Lakhs over last three Financial Years (FY) ending on 31.03.24 (i.e. F.Y. 2021-22, 2022-23, 2023-24).		C-1	TURNOVER: Bidders must have achieved an average annual financial turnover (Audited) of Rs. 630 Lakhs over last three Financial Years (FY) ending on 31.03.24 (i.e. F.Y. 2021-22, 2022-23, 2023-24).	
		D	Price Bid Opening Note: Price Bids of only those bidders shall be opened who stand qualified after compliance of criteria A to C	Applicable By BHEL	D	Price Bid Opening Note: Price Bids of only those bidders shall be opened who stand qualified after compliance of criteria A to C and E	Applicable By BHEL
					E	Approval of Customer Note: Names of bidders who stand qualified after compliance of criteria A to C shall be forwarded to customer for their approval.	Applicable By BHEL
5	Annexure – 6 : Integrity Pact	Refer <u>Revised Annexure-6 Rev – 01</u> attached below with this Corrigendum - 3.					

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D) PRICE SCHEDULE (REV-00) – VOLUME II : The Following description are revised as below:

Sl. No.	Existing in Tender	Revised As
1	NAME OF JOB: CONSTRUCTION WORK OF 01 NOS 150M HEIGHT RCC SINGLE FLUE CHIMNEY COMPLETE IN ALL RESPECT INCLUDING CHIMNEY RCC WIND SHIELD, FABRICATION & ERECTION OF STEEL FLUE CANS, ERECTION OF SHOP FABRICATED STRUCTURAL PLATFORMS, INSTALLATION OF ELECTRICAL ITEMS IN CONFORMITY WITH THE APPROVED LAYOUT ETC TO COMPLETE THE CHIMNEY IN ALL RESPECT (BUT EXCLUDING PILING AND EXCAVATION WORKS, BOROSILICATE WORKS) CHIMNEY UNIT#2 FOR AT BARH SUPER THERMAL POWER PROJECT, STAGE I, BIHAR.	NAME OF JOB: CONSTRUCTION WORK OF 01 NO 150M HEIGHT RCC SINGLE FLUE CHIMNEY COMPLETE IN ALL RESPECT INCLUDING CHIMNEY RCC WIND SHIELD, FABRICATION & ERECTION OF STEEL FLUE CANS, ERECTION OF SHOP FABRICATED STRUCTURAL PLATFORMS, INSTALLATION OF ELECTRICAL ITEMS IN CONFORMITY WITH THE APPROVED LAYOUT ETC TO COMPLETE THE CHIMNEY IN ALL RESPECT (BUT EXCLUDING PILING AND BOROSILICATE WORKS) OF CHIMNEY UNIT#2 FOR BARH SUPER THERMAL POWER PROJECT, STAGE I, BIHAR.
2	ITEM DESCRIPTION & PART NO. TOTAL PRICE FOR ENTIRE SCOPE OF WORK AS PER TENDER NO. BHEL / CPC / BARH / CHM / 25 / 075 for "CONSTRUCTION WORK OF 01 NOS 150M HEIGHT RCC SINGLE FLUE CHIMNEY COMPLETE IN ALL RESPECT INCLUDING CHIMNEY RCC WIND SHIELD, FABRICATION & ERECTION OF STEEL FLUE CANS, ERECTION OF SHOP FABRICATED STRUCTURAL PLATFORMS, INSTALLATION OF ELECTRICAL ITEMS IN CONFORMITY WITH THE APPROVED LAYOUT ETC TO COMPLETE THE CHIMNEY IN ALL RESPECT BUT EXCLUDING PILING AND EXCAVATION WORKS CHIMNEY UNIT#2 FOR AT BARH SUPER THERMAL POWER PROJECT, STAGE-I, BIHAR, INDIA."	ITEM DESCRIPTION & PART NO. TOTAL PRICE FOR ENTIRE SCOPE OF WORK AS PER TENDER NO. BHEL / CPC / BARH / CHM / 25 / 075 for "CONSTRUCTION WORK OF 01 NO 150M HEIGHT RCC SINGLE FLUE CHIMNEY COMPLETE IN ALL RESPECT INCLUDING CHIMNEY RCC WIND SHIELD, FABRICATION & ERECTION OF STEEL FLUE CANS, ERECTION OF SHOP FABRICATED STRUCTURAL PLATFORMS, INSTALLATION OF ELECTRICAL ITEMS IN CONFORMITY WITH THE APPROVED LAYOUT ETC TO COMPLETE THE CHIMNEY IN ALL RESPECT (BUT EXCLUDING PILING AND BOROSILICATE WORKS) OF CHIMNEY UNIT#2 FOR BARH SUPER THERMAL POWER PROJECT, STAGE I, BIHAR."

E) Revised BOQ Cum Rate Schedule Rev 01 - Enclosed herewith. (Refer Annexure – A of this corrigendum)

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F) Some of the Bidders sought clarifications in regard to the published tender specification. The clarifications/modifications issued by BHEL are as below:

Sl. No.	Reference Tender Document	Reference clause	Existing Provision	Bidder's query	BHEL's Clarification
1	GCC	Cl. 2.17: Price Variation Compensation	<p>Cl. 2.17.1 & 2.17.2 In order to take care of variation in cost of execution of work on either side, due to variation in the index of LABOUR, HIGH SPEED DIESEL OIL, WELDING ROD, CEMENT, STEEL, MATERIALS, Price Variation Formula as described herein shall be applicable.</p> <p>Percentage Component (K) to be considered in the PV formula is divided in 3 groups as below, A) Cement & Steel: Free Issue (BHEL Scope) B) Cement & Steel: In Contractor Scope C) Cement in Contractor Scope, and Steel is Free Issue (BHEL Scope)</p>	<p>Percentage Component (K) to be considered in the PV formula is divided in 3 groups as below, A) Cement & Steel: Free Issue (BHEL Scope) B) Cement & Steel: In Contractor Scope C) Cement in Contractor Scope, and Steel is Free Issue (BHEL Scope) However, in this tender, Supply of Structural Steel for items other than BOQ item no. A26(i)(Flue Can) are in Contractor's scope of work. Thus, aforesaid options A ,B & C are not applicable in this tender. Please modify aforesaid options under percentage Component (K) accordingly to suit our case wherein the Price Variation for aforesaid Structural Steel supplied by Contractor will be paid.</p>	GCC Clause No 2.17.2 (C) - shall be applicable for this contract - Cement in Contractor Scope, and Steel is Free Issue (BHEL Scope)
2	TCC	Scope of work	Scope of work - Construction of 1 no. Chimney excluding piling, excavation, borosilicate works.	<p>We understand that the scope of work is excluding piles, pile head cutting, excavation upto PCC bottom level & casting of PCC below Pile cap and not in Contractor's scope of work . Please confirm / clarify. Further, in above case, item no. 2B - Providing & installing of temporary steel sheet piles will not be applicable. Please confirm.</p>	Excavation works has been included in the tender. TCC Clause 2.1. Refer Revised BOQ Cum Rate Schedule Rev 01 (Annexure -A)
3	TCC	Ch. II, Cl. 2.2.6 & 2.2.7: Borosilicate lining work to Flue Can by other agency	Cl. 2.2.6 : Supply and installation of Closed Cell Borosilicate Glass Block Lining System shall be excluded from this scope of work. However, surface preparation of FLUE CANS should be suitable for application of Closed Cell Borosilicate Glass Block Lining System. There should not be any defects like improper fit-up, improper joint welding, left-out lifting hooks & any other left-out attachments before handing-over	Any delay due to delay in fixing of Borosilicate lining work by other shall not be attributable to the Contractor. Please confirm.	Agreed.

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Sl. No.	Reference Tender Document	Reference clause	Existing Provision	Bidder's query	BHEL's Clarification
			of flue liner to borosilicate application agency. After completion of Flue Can Fabrication the same shall be handed over to Borosilicate Agency for application of primer. Cl. 2.2.7: The bidder has to provide the support to Borosilicate supply and installation agency for erection of the hanging platform & other lifting system required for installation of borosilicate lining by providing the support of following T&Ps: a) Passenger lift. b) Winch support for lifting the member of hanging platform. c) Initial power supply at roof deck. d) The bidder has to place the completed flue can on a raised platform / raised height (+600 mm from the ground LVL) for easy access for the painter of borosilicate agency for initial blasting & primer application on inner surface of the flue can.....		
4	TCC	Ch. III, Cl. 3.10.1: Open space	BHEL shall provide free of charge limited open space for office, storage shed and laydown area as and where made available by customer	We request you to provide us the lead / distance between the area allocated for batching plant and work location/site.	The allocated area (as available) shall be provided at site during execution.
5	TCC	Ch. IV, Cl. 4.0 , page 22/44: Tools and Plants	No. of T & Ps to be deployed at site shall be decided w.r.t. monthly plan based on site requirement. Below given nos. are tentative for planning purposes by bidder.	We presume that the list of T&Ps and corresponding nos. provided are tentative and deployment of the same is not mandatory requirement. Please confirm. Also, number of some of the T&P's mentioned in the tender appears to be high in view of scope of work. For, example 2 sets of Slipform , etc . Please review & correct the same.	T&Ps shown in the mentioned list is tentative requirement. Refer Sl. No. A) – 4 for revised T&P
6	TCC	Ch. IV, Cl. 2.8.7 & 4.1.8: Chiller Plant	<u>TCC, Ch. IV, Cl. 4.1.8</u> Chiller plant of adequate capacity for Temperature controlled concrete - 01 No	We understand that installation of chiller plant is not mandatory & Bidder is free to make alternative arrangement for temperature control of fresh concrete. Kindly provide a relevant BOQ item for the same.	Tender Conditions shall prevail

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Sl. No.	Reference Tender Document	Reference clause	Existing Provision	Bidder's query	BHEL's Clarification
7	BOQ, item no. 14.ii.b & c	BOQ item no. 14	Providing and laying design mix cement concrete with graded aggregate (maximum size of coarse aggregate not exceeding 20 mm) for reinforced concrete work at all levels for all kinds of work, including labour, materials, equipment, handling, transporting, batching, mixing, placing, levelling, compacting, curing, testing etc. and rendering or cleaning and finishing the exposed surface with cement mortar (1:3) to give smooth and even surface, all complete as per specifications, drawings and instructions of the Engineer, but excluding all formwork and reinforcing steel: ii) For all other works : b) Grade M-30 for chimney shell, corbel, external platforms, roof slab and other shell attachments - 40 cum c) Grade M-35 for chimney shell, corbel, external platforms, roof slab and other shell attachments - 4,300 cum	Item description of both the BOQ items 14 ii) b) & 14 ii) c) is the same with different grade of concrete. Please confirm/correct the same. Please note that item for all other components of the super structure, roof slab, mini -shells, beams, columns wall etc. is missing in the BOQ.	BOQ description is found ok.
8	BOQ Cum Rate Schedule, item no. 17.a.i)		Inner and outer faces of wind shield with slip form shuttering: For Mobilisation & Installation (Payment of the total certified quantity of the shell shall be made for mobilisation of slipform only after start of successful slipping as certified by Engineer in charge.) -16,000 Sqm	We presume, after erection of slipform & start of successful slipping of slipform, the payment for complete quantity indicated at BOQ item no. 17.a.i) i.e. for 16,000 sqm shall be paid to the Contractor. Please confirm.	Mode of measurement shall be in line with BOQ 17 ii). Quantities shall be as per actual quantities calculated by site.
9	BOQ Cum Rate Schedule, item no. A24		Supplying, fabrication, erection and alignment of factory made chequered plate conforming to IS 3502 (minimum 6 mm o/p) in platforms, staircases with edge binding strips and anti-skid nosing in treads etc. including fixing clamps, fittings, fixtures, grinding, drilling, welding, edge preparation, primer, finish paint etc. all complete as per drawing and specification. Quantity - 25 MT	In the description of BOQ it is mentioned as "Supply, fabrication, erection & alignment of factory made plate " is mentioned. We understand that the Supply of factory made chequered plate is in Contractor's scope of work. However, the rate for the same calculated based on weightages given appears to be low. Please correct the rate per unit same.	The supply of Chequered plate is in contractor's scope. Refer Revised BOQ Cum Rate Schedule Rev 01 (Annexure -A)
10	BOQ Cum Rate Schedule,	BOQ rate per unit calculated based on	Designing, Providing and installing an electrically operated steel roll-up door at chimney base (total opening size of apprx 75 m2 in which rolling shutter size will be approx 4 m x	BOQ rate per no. calculated based on weightage of BOQ item given appears to be	Refer Revised BOQ Cum Rate Schedule Rev 01 (Annexure -A)

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Sl. No.	Reference Tender Document	Reference clause	Existing Provision	Bidder's query	BHEL's Clarification
	item no. A47	weightage of BOQ item	5 m, and remaining area covered with grill for ventilation), with all hardware and mechanisms, fittings and fixtures, locking arrangements, frames, fasteners, gear handle arrangement for standby manual operation, all electrical accessories such as motors, control systems, cables, etc. including the cost of all labour, material and equipment, fixing in position, grouting primer and finish painting, testing, etc., complete as per drawing and specifications. Quantity - 1 each	low. Please confirm the unit /correct the rate per unit of the same.	
11	NOTICE INVITING TENDER	Clause No. 19	BHEL shall be resorting to Reverse Auction (RA) (Extant Guidelines as available on < https://www.bhel.com/guidelines-reverse-auction-2024 > on "supplier registration page") for this tender. RA shall be conducted among all the techno-commercially qualified bidders.	Reverse Auction (RA) should not be applicable	Tender Conditions Shall Prevail
12	NOTICE INVITING TENDER	Clause No. 29	Micro and Small Enterprises (MSE): This is a WORKS CONTRACT. MSE BENEFIT SHALL NOT BE APPLICABLE FOR THE PACKAGE.	MSME Should be applicable. Please note that BIL is covered under MSME and our MSME registration number is UDYAM-MH-19-0001067	Tender Conditions Shall Prevail
13	NOTICE INVITING TENDER	Format - Annexure- 9	Format - Annexure- 9: Declaration reg. minimum local content in line with revised public procurement	Please note that in Local content format " Order 2017-Revision dated 04.06.2020 should be change as Order 2017 dated 19.07.2024. " Please check and confirm	Refer Revised Annexure-9 attached below with this Corrigendum -3.
14	Major Highlights of Tender	Clause No. 6	(Rights of BHEL" – GCC Clause 2.7) - Clause pertains to procurement at Risk and Cost of bidder, in case of default of Contractor is replaced by "Breach of Contract" Clause. The total liability on account of Breach of Contract is limited to 10% of the Contract Value.	(Rights of BHEL" – GCC Clause 2.7) - Clause pertains to procurement at Risk and Cost of bidder, in case of default of Contractor is replaced by "Breach of Contract" Clause. The total liability on account of Breach of Contract is limited to 3% of the Contract Value.	Tender Conditions Shall Prevail
15	Major Highlights of Tender	Clause No. 12	Procurement at Risk and Cost of bidder, in case of default of Contractor is removed (replaced by "Breach of Contract" clause) - The total liability on account of Breach of Contract is limited to 10% of the Contract Value.	Procurement at Risk and Cost of bidder, in case of default of Contractor is removed (replaced by "Breach of Contract" clause) - The total liability on account of Breach of Contract is limited to 3% of the Contract Value.	Tender Conditions Shall Prevail

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Sl. No.	Reference Tender Document	Reference clause	Existing Provision	Bidder's query	BHEL's Clarification
16	Major Highlights of Tender	Clause No. 14	Over Run Compensation (ORC) - Not Applicable.	ORC should be applicable. Total Over Run Compensation shall be limited to 20% of the cumulatively executed contract value till the month	Tender Conditions Shall Prevail
17	TCC	Clause No. 2.1	The work to be done under this specification comprises of construction work of 01 no 150M height RCC Single Flue Chimney complete in all respect including Chimney RCC wind shield, fabrication & erection of steel flue cans, erection of shop fabricated structural platforms, installation of electrical items in conformity with the approved layout etc to complete the chimney in all respect but excluding piling and excavation works Chimney Unit#2 for at BARH Super Thermal Power Project, Stage-I, Bihar	Scope of bidder should be as per BOQ items. Chimney work is excluding pile breaking and excavation work. As the water level is at 1.5 Mtr to 2 Mtr, It is advisable scope of dewatering and PCC Work at founding level to be done by piling contractor /other agency and we request you to revise the item No – 13 of BOQ for PCC and descope the item no 2A(B)	Tender Conditions Shall Prevail
18	TCC	Clause 2.2.6	Supply and installation of Closed Cell Borosilicate Glass Block Lining System shall be excluded from this scope of work. However, surface preparation of FLUE CANS should be suitable for application of Closed Cell Borosilicate Glass Block Lining System.....	Since the installation of BSGB lining work is excluded from bidder's scope. So therefore Surface preparation of flue can should be in the scope of BSGB lining agency	Tender Conditions Shall Prevail
19	TCC	Clause 2.2.7	The bidder has to provide the support to Borosilicate supply and installation agency for erection of the hanging platform & other lifting system required for installation of borosilicate lining by providing the support of following T&Ps: a) Passenger lift. b) Winch support for lifting the member of hanging platform. c) Initial power supply at roof deck. d) The bidder has to place the completed flue can on a raised platform / raised height (+600 mm from the ground LVL) for easy access for the painter of borosilicate agency for initial blasting & primer application on inner surface of the flue can. e) Chimney vendor shall provide man access lift till installation and commissioning of permanent lift.	As this clause create hurdles in execution activity. We request to BHEL to delete this clause and add application of BSGB work in bidder scope for better execution activity. Initial Blasting or Primer application on inner surface of flue shall be done after erection of Flue can If the finalisation of Borosilicate supply and installation agency got delayed by BHEL. Then bhel can't bound BIL to support other agency.	Tender Conditions Shall Prevail
20	TCC	Clause 2.5.14	Medical/First aid center/medicine purchased for emergency/Doctor purpose along with ambulance services with fuel and operator (round the clock) shall be arranged by BHEL for handling medical emergencies. Cost against these facilities shall be distributed / shared among the vendors	Medical/First aid center/medicine purchased for emergency/Doctor purpose along with ambulance services with fuel and operator (round the clock) shall be arranged by BHEL for handling medical emergencies. Cost against	Tender Conditions Shall Prevail

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Sl. No.	Reference Tender Document	Reference clause	Existing Provision	Bidder's query	BHEL's Clarification
			working in Project site proportionately based on contract value.	these facilities shall be bear by BHEL. We request BHEL to arrange Medical/First aid center/medicine purchased for emergency/Doctor purpose along with ambulance services with fuel and operator (round the clock) till completion of project on free of cost basis	
21	TCC	Clause No. 3.11.1	Labour colony is to be developed by bidder for all the labourers required to be deployed for their scope of work. Labour colony set-up is to be developed in compliance of statutory requirements.	We request BHEL to provide Land for labour colony on free of cost basis with free water and power	Tender Conditions Shall Prevail
22	TCC	Clause No. 3.13.1	BHEL Shall Provide Construction Power free of charge at 415V level at two points (within 500 M from his workplace), bidder has to make his own distribution arrangement to draw electricity.	Uninterrupted supply of Electricity (Free of cost) at Four point to be provided within 100 m of working Site, 100m of Batching Plant, 100m of fabrication yard and 50m of Labour Colony. Connections should be provided with handing over of work front to BIL. Further Please also inform the chargeable rate for power	Tender Conditions Shall Prevail
23	TCC	Clause No. 3.14	Contractor has to make his own arrangements for construction water. However, drawl of construction/ potable water from the bore-well may be permitted if found suitable. Any statutory clearance required shall be obtained by the contractor. Assistance, if required shall be provided by the BHEL/NTPC.	Uninterrupted supply of water (Free of cost) at Three point to be provided within 100 m of working Site, 100m of Batching Plant, 100m of fabrication yard and 50m of Labour Colony. Connections should be provided with handing over of work front to BIL.	Tender Conditions Shall Prevail
24	TCC	Clause No. 4.1	A: Tools and Plants: Nos. of T&Ps to be deployed at site shall be decided w.r.t. monthly plan and review format (F-14) based on site requirement. Below given Nos are tentative for planning purposes by the bidder.	After the award of order, the T&Ps schedule will be prepared by BIL for BHEL approval.	Tender Conditions Shall Prevail
25	TCC	Clause No. 4.1.11	Slip Form Shuttering System & Necessary Spare Parts - 02 Set (To carryout erection of both flue cans parallel)	Slip Form Shuttering System should be 1 instead of 2 and its use for construction of shell	Agreed. Refer Sl. No. A) – 4 for revised T&P
26	TCC	Clause 4.1.28	0.47 mm thick color coated GI sheet should be used along with Slipform shutter plate.	We request you to delete this as this is Not required	Tender Conditions Shall Prevail

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Sl. No.	Reference Tender Document	Reference clause	Existing Provision	Bidder's query	BHEL's Clarification
27	TCC	Clause 6.0	Construction Manager/Site In-Charge of BHEL at site within seven (07) days from date of LOA and submit detailed mobilization plan to start work within 15 days from date of LOA; unless instructed by BHEL to differ start of work in writing. Date of Start of work shall be considered as 15 days after date of LOA or as instructed by BHEL in writing.	BHEL will inform Site hand over date & will give notice for mobilization of equipment & manpower. The mobilization will be done by BIL within 30 days of receiving NTP from BHEL.	Tender Conditions Shall Prevail
38	TCC	Clause No. 6.1	START DATE / ZERO DATE Mobilization plan to start work within 15 days from date of LOA; unless instructed by BHEL to differ start of work in writing. Date of Start of work shall be considered as 15 days after date of LOA or as instructed by BHEL in writing.	The Actual Date of Start of Contract Period (Zero Date) shall be date of handing over of site agreed in writing by BHEL & BIL Engineer after completion of following: - 1. Handing over of hindrance free area for site, fabrication yard & Stock Yard 2. Issue of Form – V 3. Completion of piling work and excavation Issue of Approved for Construction Drawings for raft & Chimney shell.	Tender Conditions Shall Prevail
39	TCC	Clause 6.1 & 6.2	The contractor has to subsequently augment his resources in such a manner that the entire works are completed within the contract period of Twenty Months (20) Months from the date of start of work in a manner required by BHEL to match with the project schedule. 6.2.1 Slip-form Assembly and Erection Completion - 2nd Months 6.2.2 Completion of RCC shell & Installation of Temporary Aviation Light. (M1) - 7th Months 6.2.3 Completion of platform beams fabrication and erection - 11th Month 6.2.3 Slipform Dismantling - 12 th Months 6.2.4 Flue Can Fabrication and Erection (M2) - 16th Months 6.2.5 External Painting - 19 th Month 6.2.6 Completion of all Balance Misc. Works like electrical	The contractor has to subsequently augment his resources in such a manner that the entire works are completed within the contract period of Twenty Two Months (22) Months from the date of start of work in a manner required by BHEL to match with the project schedule. 6.2.1 Slip-form Assembly and Erection Completion – 4th Months 6.2.2 Completion of RCC shell & Installation of Temporary Aviation Light. (M1) – 9th Months 6.2.3 Completion of platform beams fabrication and erection – 12th Month 6.2.3 Slipform Dismantling – 13th Months 6.2.4 Flue Can Fabrication and Erection (M2) – 19th Months 6.2.5 External Painting – 21st Month	Please refer revised TCC Clause No. 6.2 above.

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Sl. No.	Reference Tender Document	Reference clause	Existing Provision	Bidder's query	BHEL's Clarification
			item installation, including erection of elevator etc. - 20th Months	6.2.6 Completion of all Balance Misc. Works like electrical item installation, including erection of elevator etc. - 22nd Months	
40	TCC	Clause No. – 6.6.2 & 6.6.3	LD on Intermediate Milestone Against M1 - 0.5% per week - Maximum 2% of Executable Contract Value. - Against M2 - 0.5% per week - Maximum 3% of Executable Contract Value	Please delete this clause as this will create negative cash flow.	Tender Conditions Shall Prevail
41	TCC	Clause No. 9.6	Recovery of Materials (Penal Rates): 1 Cement (PPC). – Rs. 6,500/- per MT2 Cement (OPC). – Rs. 7,000/- per MT3 Reinforcement steel/MS earthing rod – Rs. 60,000/- per MT4 Structural Steel (Plates, Rolled Sections etc.) – Rs. 68,000/- per MT5 Structural Steel Gratings – Rs. 1,10,000 per MTPenal Rate will be 1.05 times the actual cost to BHEL or Rate mentioned in Table 9.6.1 above, whichever is higher, shall be imposed	Penalties should be as per market rate	Tender Conditions Shall Prevail
42	SCC	Clause No. 6.1.7	Approach road conditions from the stores / yards to the erection/ construction site may not be equipped and ideal for smooth transportation of the material. Contractor may have to be adequately prepared to transport the materials under the above circumstances without any extra cost.	Approach road to be provided by BHEL. Specify the distance of Batching Plant, Fabrication yard and Stock Yard location from Chimney area. It should be 100-200m from the working area and BIL will be allowed to Set up Batching Plant, Fabrication yard nearby working area.	Space shall be provided within plant premises as per available space at site during execution stage.
43	SCC	Clause No. 6.4.4.4	Reinforcement Steel, MS earthing rod, Foundation bolts and MS Rails Wastage: Allowable Wastage: (+3%) of the theoretical consumption shall be considered as allowable wastage.	Allowable wastage will be 5%.	Tender Conditions Shall Prevail
44	SCC	Clause No. 6.4.4.6	Structural Steel Wastage: Allowable wastage: 4% (FOUR percent) of the theoretical consumption shall be considered. Wastage shall be considered as cut pieces and scrap material, measured as per actual weight basis.	Allowable wastage will be 5%.	Tender Conditions Shall Prevail
45	SCC	Clause No. 9.1	HSE (Health, safety & Environment): Contractor will comply with HSE (Health, Safety & Environment) requirements of BHEL as per the "HSE Plan for Site Operations by	To be as per govt standard rules.	Tender Conditions Shall Prevail

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Sl. No.	Reference Tender Document	Reference clause	Existing Provision	Bidder's query	BHEL's Clarification
			Subcontractors" (Document No. HSEP: 14 Rev02, Dated 21-12-2022) and any other document issued along with the tender. In case of any ambiguity between these documents, BHEL's Engineer shall be the deciding authority, whose decision shall be final and binding on the contractor.		
46	SCC	Clause No. 10.4	The payment for running bills will normally be released within 30 days of submission of running bill complete in all respects with all documents. It is the responsibility of the contractor to make his own arrangements for making timely payments towards labour wages, statutory payments, outstanding dues etc. and other dues in the meanwhile. 60% of RA Bills complete and correct in all respects and certified by BHEL Engineer, shall be paid within 15 days of receipt. Balance payment shall be within 30 days.	Contractor's RA bill, complete & correct in all respects, certified by BHEL engineer, shall be paid within 30 days of receipt of bill with all supporting documents. 70% Payment should be released within 7 days & balance 30% payment should be released within 30 days.	Tender Conditions Shall Prevail
47	GCC	Clause No. 1.10	1.10 SECURITY DEPOSIT (5% of the Contract Value) 1.10.1 Upon acceptance of Tender, the successful bidder shall be required to deposit the 5% of the contract value as Security Deposit towards fulfilment of any obligations in terms of the provisions of the contract	Security Deposit should be 3%.	Tender Conditions Shall Prevail
48	GCC	Clause No. 1.10.3 Note (2)	2)In case of delay in submission of security deposit, enhanced security deposit which would include interest (Repo rate +4%) for the delayed period, shall be submitted by the bidder.	Interest Should be [@ (Repo rate + 2%) at monthly rest plus GST] for the delayed period	Tender Conditions Shall Prevail
49	GCC	Clause 1.10.6	The validity of Bank Guarantees towards Security Deposit shall be till actual completion work + Guarantee Period + 3 months	Please allow initial validity of 1 year for security deposit	Tender Conditions Shall Prevail
50	GCC	Clause No. 2.7.3	In case Contractor fails to deploy the resources as per requirement informed by BHEL in writing to expedite the work, BHEL can deploy own/hired/otherwise arranged resources and recover the expenses incurred from the dues payable to contractor. Recoveries shall be actual expenses incurred plus 5% overheads or as defined in TCC	Recoveries shall be actual expenses incurred plus Nil overheads or as defined in TCC.	Tender Conditions Shall Prevail
51	GCC	Clause No. 2.7.7	BHEL may permit or direct contractor to demobilize and remobilize at a future date as intimated by BHEL in case of following situations for reasons other than Force majeure	Compensation to be paid as per mutual agreement	Tender Conditions Shall Prevail

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Sl. No.	Reference Tender Document	Reference clause	Existing Provision	Bidder's query	BHEL's Clarification
			<p>conditions and not attributable to contractor:</p> <p>i) suspension of work(s) at a Project either by BHEL or Customer,</p> <p>or</p> <p>ii) where work comes to a complete halt or reaches a stage wherein worthwhile works cannot be executed and there is no possibility of commencement of work for a period of not less than three months.....</p> <p>In such cases, charges towards demobilization and remobilization shall be as decided by BHEL after successful remobilization by contractor at site, and decision of BHEL shall be final and binding on the contractor. After remobilization, all conditions as per contract shall become applicable. In case Contractor does not remobilize with adequate resources or does not start the work within the period as intimated, then BHEL reserves the right to terminate the contract and effect remedies under Clause 2.7.2.2. In case of any conflict, BHEL decision in this regard shall be final and binding on the contractor</p>		
52	GCC	Clause 2.7.9	<p>For the periods, wherein the delay as per the comprehensive delay analysis carried out is solely attributable to contractor, BHEL shall have the right to impose Liquidated Damage at the rate of 0.5% of the contract value, per week of delay or part thereof subject to a maximum of 10% of the contract value.</p>	<p>An amount equal to 0.25% of contract value per week with maximum limit of 5% of executed contract value excluding GST will be imposed as liquidated damages if delay is attributable to BIL.</p> <p>The maximum amount of liability of BIL for LD & other penalties will be maximum of 5% of contract value excluding GST.</p> <p>Grace Period of 3 months will be allowed for imposition of LD.</p>	Tender Conditions Shall Prevail
53	GCC	Clause No. 2.8.3	<p>The contractor shall comply with all applicable State and Central Laws, Statutory Rules, Regulations, Notifications, etc. such as Payment of Wages Act, Minimum Wages Act, Workmen Compensation Act, Employer's Liability Act,</p>	<p>Rates quoted in the tender are on the basis of State Minimum wages where the work is being executed.</p>	Tender Conditions Shall Prevail

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Sl. No.	Reference Tender Document	Reference clause	Existing Provision	Bidder's query	BHEL's Clarification
			Industrial Disputes Act, Employers Provident Act, Employees State Insurance Scheme, Contract Labour (Regulation and Abolition) Act, 1970-----		
54	GCC	Clause 2.11	EXTENSION OF TIME FOR COMPLETION: If the completion of work as detailed in the scope of work gets delayed beyond the contract period, the contractor shall request for an extension of the contract and BHEL at its discretion may extend the Contract.	EOT/Time extension shall be decided by BHEL within 1 Months of receipt of EOT application submitted by BIL.	Tender Conditions Shall Prevail
55	GCC	Clause No. 2.13.1	2.13.1 INTEREST FREE MOBILIZATION ADVANCE: Competent Authority of BHEL may approve proposals for payment of Interest Free Secured Mobilization Advance (limited to a maximum of 5% of the Contract Value) only in Installation Works in Power Plants under exceptional circumstances. Interest Free Mobilization Advance shall be disbursed in specifically mentioned stages of major resource mobilization in the beginning of the contract, as specified in the TCC, in three or more instalments with the value of any instalment not more than 2.5% of the Contract Value. The next instalment will be due only on completion of the activities linked to the previous instalment. Each such instalment is to be secured through BG of 100% of the instalment amount	5% mobilization advance (Interest Free) excluding GST in single installment should be release without BG against submission of installment as per mentioned below: 1. For Mobilization of Batching Plant, Cement Silo, Transit Mixture (01 no), JCB (01 no), - 3.0% 2. For Mobilization of Material Lifting Winch and Passenger Lift - 1% 3. For Mobilization of Hydraulic Jack Set with pump, Jack Rod, Recovery Jack, Laser Light, Hydraulic Pump and Turn Buckle Jacks. - 1%	Tender Conditions Shall Prevail
56	GCC & Major Highlights of Tender	Clause No.2.14 GCC & Clause No. 5 Major Highlights	2.14.1 Variation in Final Executed Contract Value The quantities given in the contract are tentative and may change to any extent (both in plus side and minus side). No compensation becomes payable in case the variation of the final executed contract value is within the limits of Minus (-) 15% of awarded contract value. Also, no compensation becomes payable in case the contract gets partially executed/ short closed/ terminated/ work withdrawn under Rights of BHEL mentioned in Clause 2.7 of GCC. In case of work terminated / short closed under clause 2.7.4 of GCC, compensation may be considered only if BHEL receives	No compensation becomes payable in case the variation of the final executed contract value is within the limits of Minus (-) 5% of awarded contract value. Compensation amounting to quantity decreased multiplied by 20% of unit rates of particular item/items will be paid to BIL in case of reduction in quantity of any item. BIL will also be compensated @20% of amount reduction of awarded contract value with respect to executed	Tender Conditions Shall Prevail

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Sl. No.	Reference Tender Document	Reference clause	Existing Provision	Bidder's query	BHEL's Clarification
			<p>compensation from customer.</p> <p>Provision is kept for revision of rates for individual BOQ items(s) in the event the executed quantity exceeds two times the quantity in the original price schedule</p>	<p>contract value if executed contract value is less than awarded contract value.</p>	
57	GCC	Clause No. 2.20	<p>2.20.1 "Force Majeure" shall mean circumstance which is: 2.20.1.1.1 beyond control of either of the parties to contract, 2.20.1.1.2 Either of the parties could not reasonably have provided against the event before entering into the contract, 2.20.1.1.3 Having arisen, either of the parties could not reasonably have avoided or overcome, and 2.20.1.1.4 is not substantially attributable to either of the parties And prevents the performance of the contract. Such circumstances include but not limited to 2.20.1.2 War, hostilities, invasion, act of foreign enemies.</p> <p>.....</p> <p>.....</p> <p>.....</p>	<p>Rates quoted in the tender are on the basis considering no implied costs owing to any force majeure, govt imposition, lock-down situation owing to any act of God or a pandemic or endemic or Covid or a war or any other cause like local strikes that is or may be beyond the control of the BIL. If the work is stopped or site is unavailable to work or any kind of restriction is imposed or labour is idle due to gate pass issues owing to pandemic, or due to delay in approval of design & drawings or delay in issuance of free issue material and for any of the reasons cited herein, BIL will be compensated for idle of labour, staff, equipment, facilities, slipform Equipment & Financial charges of Bank Guarantee etc., and contractual completion time will be extended. Such compensation will not be linked to compensation from Principal Owner to BHEL.</p>	Tender Conditions Shall Prevail
58	GCC	Clause No. 21	<p>2.21 ARBITRATION & CONCILIATION</p> <p>2.21.1 ARBITRATION:</p> <p>Except as provided elsewhere in this Contract, in case Parties are unable to reach amicable settlement (whether by Conciliation to be conducted as provided in Clause 2.21.1 herein above or otherwise) in respect of any dispute or difference; arising out of the formation, breach, termination, validity or execution of the Contract; or, the respective rights and liabilities of the Parties; or, in relation to interpretation of any provision of the Contract; or, in any manner touching upon the Contract (hereinafter referred to as the 'Dispute'),</p>	<p>The number of arbitrators shall be three. Each party shall appoint their Arbitrator and the two appointed Arbitrators shall thereafter appoint the Presiding arbitrator. The work being construction related, it is agreed to appoint construction domain experienced Arbitrator to enable better understanding of the issues and early disposal of the issues.</p> <p>The place of arbitration shall be New Delhi. New Delhi law shall apply.</p>	Tender Conditions Shall Prevail

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			then, either Party may, refer the disputes to Arbitral Institution i.e. "India International Arbitration Centre (IIAC) Delhi" for PSNR & PSER / "Mumbai Centre for International Arbitration (MCIA), Mumbai" for PSWR / "Nani Palkhivala Arbitration Centre (NPAC) Chennai" for PSSR and such dispute to be adjudicated by Sole Arbitrator appointed in accordance with the Rules of said Arbitral Institution		
59	GCC	Clause No. 2.23.2	2.23.2 Final Bill Final Bill' is used for final payment on closing of Running Account for works or for single payment after completion of works. 'Final Bill' shall be submitted as per prescribed format after completion of works as per scope and upon material reconciliation, along with the following: i) 'No Claim Certificate' by Contractor as per clause 2.6.10 of GCC ii) Clearance certificates where ever applicable viz. Clearance Certificates from Customer, various Statutory Authorities like Labour department, PF Authorities, Commercial Tax Department etc. iii) Indemnity Bond as per prescribed format. BHEL shall settle the final bills after deducting all liabilities of Contractor to BHEL.	Final bill to be release within 45 days	Tender Conditions Shall Prevail
60	GCC	Clause 2.24	Clause no. 2.24 of GCC PERFORMANCE GUARANTEE FOR WORKMANSHIP: Even though the work will be carried out under the supervision of BHEL Engineers the Contractor will be responsible for the quality of the workmanship and shall guarantee the work done for a period of Twelve months from the date of commencement of guarantee period as defined in Technical Conditions of Contract, for good workmanship and shall rectify free of cost all defects due to faulty erection detected during the guarantee period. In the event of the Contractor failing to repair the defective works within the time specified by the Engineer, BHEL may proceed to undertake the repairs of such defective works by	Upon receipt of Notice of Virtual Completion from BIL, within 15 days, BHEL shall intimate to BIL details of any defects / damages / defective workmanship if noticed in any of the materials / services as per "Scope of Work" (Called Punch List) and BIL shall rectify the punch list free of cost to the full satisfaction of BHEL. Within 15 days of intimation by BIL of completion of the punch list, BHEL will take over civil work and BHEL shall issue a completion certificate within 30 days of the above intimation. Warranty period for Workmanship / Defect liability shall be	Tender Conditions Shall Prevail

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Sl. No.	Reference Tender Document	Reference clause	Existing Provision	Bidder's query	BHEL's Clarification
			itself, without prejudice to any other rights and recover the cost incurred for the same along with 5% overheads from the Security Deposit.	12 months from the date of intimation of completion of Punch List by BIL or when the Principal Employer cum the Owner starts the use of structures whichever is earlier.	
61	GCC	Clause No. 2.27	<p>LIMITATION ON LIABILITY:</p> <p>Notwithstanding anything to the contrary in this Contract or LOA or any other mutually agreed document between the parties, the maximum liability, for damages, of the contractor, its servants or agents, shall under no circumstances exceed an amount equal to the Price of the Contract or the Work Order. The Contractor shall not in any case be liable for loss of profit or special, punitive, exemplary, indirect or consequential losses whatsoever. This shall not be applicable on the recoveries made by Customer from BHEL on account of Contractor, any other type of recoveries for workmanship, material, T&P etc. due from the contractor.</p>	<p>It should be 5% of contract value.</p> <p>And remove the below mentioned clause:- This shall not be applicable on the recoveries made by Customer from BHEL on account of Contractor, any other type of recoveries for workmanship, material, T&P etc. due from the contractor.</p>	Tender Conditions Shall Prevail
62	Contractor All risk (CAR) Policy		Contractor All risk (CAR) Policy	CAR Policy will be taken by BHEL	As per tender Conditions
63	MARINE CUM ERECTION INSURANCE (MCE) POLICY		MARINE CUM ERECTION INSURANCE (MCE) POLICY	MCE Policy will be taken by BHEL	As per tender Conditions
64	Bank Guarantee		Formats of Bank Guarantee's	Format will be duly vetted by our bankers & thereafter BG, SDBG & retention BG will be submitted.	As per tender Conditions
65	Bank Guarantees		Bank Guarantee extension & other action by BHEL	BHEL will give advance notice of 60 days to BIL for any action to be taken by BHEL. BG's cannot be assigned to third party without approval of BIL and its bankers. BG should not be assignable.	As per tender Conditions

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Sl. No.	Reference Tender Document	Reference clause	Existing Provision	Bidder's query	BHEL's Clarification
66	Tender GA drawing		Please note that Flue dia. is 9082 mm ID & opening size shown is 7000 W x 10500 H	As flue ID is 9082mm, This will require rotation of flue can which involves lot of specialized equipment & takes more time. We request you to please increase the opening width, so flue can rotation is not required	Tender Conditions Shall Prevail. Rotation if required shall have to be done at site.
67	BOQ075, Part B, page 04 of 10	item So.no.17.a.a1)	For Mobilisation & Installation (Payment of the total certified quantity shall be made for mobilisation of slipform only after start of successful slipping as certified by Engineer incharge.)	We noted that UOM is in SQM, but we are requesting for LS as cost of mobilization and installation will be same even If quantity varies. Slipform set installed will be same.	Tender Conditions Shall Prevail
68	BOQ075, Part B, page 04 of 10	item So.no.17.a.a2)	For Dismantling of the Slipform System (Payment of the total certified quantity shall be made only after complete dismantling of slipform as certified by Engineer in charge.)	We noted that UOM is in SQM, but we are requesting for LS as cost of mobilization and installation will be same even If quantity varies. Slipform set installed will be same percentage allocated to this item is on the higher side, should be shifted towards slipform mobilization/slipping.	Tender Conditions Shall Prevail
69	BOQ075, Part B, page 03 of 10	BOQ Line item		We request you please provide us with the BBU for all BOQ line items	Tender Conditions Shall Prevail
70	TCC	TCC Clause 2.2.7	The bidder has to provide the support to Borosilicate supply and installation agency for erection of the hanging platform & other lifting system required for installation of borosilicate lining by providing the support of following T&Ps: a) Passenger lift. b) Winch support for lifting the member of hanging platform. c) Initial power supply at roof deck. d) The bidder has to place the completed flue can on a raised platform / raised height (+600 mm from the ground LVL) for easy access for the painter of borosilicate agency for initial blasting & primer application on inner surface of the flue can. e) Chimney vendor shall provide man access lift till installation and commissioning of permanent lift.	Necessary arrangements and support for Borosilicate Vendor is to be provided by BHEL and the same shall not be in chimney contractor scope. Any delay in Borosilicate works shall be not be applicable to chimney contractor for what so reason ever. Please confirm	Tender Conditions Shall Prevail

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Sl. No.	Reference Tender Document	Reference clause	Existing Provision	Bidder's query	BHEL's Clarification
71	Major Highlights of Tender	Construction Water (Clause 3.14 of TCC Chapter - III)	Contractor has to make his own arrangements for construction water. However, drawl of construction/ potable water from the bore-well may be permitted if found suitable. Any statutory clearance required shall be obtained by the contractor. Assistance, if required shall be provided by the BHEL/NTPC.	In Talcher project, construction water is provided FOC to avoid any complications. we request you to please make Construction water supply FOC.	Tender Conditions Shall Prevail
72	Major Highlights of Tender	Interest Free Mobilization Advance (GCC Clause 2.13.1)	5% of the Contract Value in three instalments as specified in TCC. (Chapter 7, Clause No. 7.2 of TCC)	Please clarify the accounting procedure as informed in pre-bid meeting GST will be paid by BHEL in mobilization advance after contractor submits proof of deposit. Further we also request you to change the wording from BG to securities as surety bond may also be submitted as per Ministry of Finance notificationdated 22nd Feb 2024.	A . Reimbursement of GST on Interest free Advance1. As per GCC clause No. 2.13.1 INTEREST FREE MOBILIZATION ADVANCE: Competent Authority of BHEL may approve proposals for payment of Interest Free Secured Mobilization Advance (limited to a maximum of 5% of the Contract Value) only in Installation Works in Power Plants under exceptional circumstances.2. As per TCC Clause No. 8.2.5 Contractor/Vendor has to issue Invoice/Debit Note/Credit Note indicating HSN/SAC code, Description, Value, Rate, applicable tax and other particulars in compliance with the provisions of relevant GST Act and Rules made thereunder.In case of Advance payment, no such document as prescribed above can be issued by the vendor (can only issue advance receipt voucher against which no input tax credit can be claimed by BHEL)In view of above it is

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Sl. No.	Reference Tender Document	Reference clause	Existing Provision	Bidder's query	BHEL's Clarification
					hereby clarified that GST shall not be reimbursed at the time of payment of interest free advance for mobilization. B. Change the wording from BG to securities as surety bondIt is hereby clarified that existing tender condition shall prevail.
73	TCC	TCC Clause 2.2.1 (b)	Fabrication & Erection of Structural Platforms (Internal & External), Staircase, Steel Flue Cans & flue duct inside the chimney, Mini Shell with Titanium cladding as per Specification, (including development of hard crusted / paved fabrication yard for onsite structural steel fabrication work wherever permitted by customer),	Provision of Space for Mechanical works is not defined. We request you to please clarify the distance from the chimney at which this area will be provided along with minimum area of approx. 25000 sqm in one parcel.	Space shall be provided within plant premises as per available space at site during execution stage.
74	TENDER GA FOR BARH ST-I U2 NEW FGD CHIMNEY	Chimney GA	Chimney GA, Drg no PE-DG-442-620-C101, Sheet 01 to 01	Request provision of Flue CAN scope drawing	Shall be provided at Later Stage of Project
75	Tech Specification - Wet Stack Study - NTPC Barh-I Unit-2 New chimney	SPEC. NO.: PE-TS-442-142-N102, Rev.00	14. Tech Specification - Wet Stack Study - NTPC Barh-I Unit-2 New chimney	There is no Line item in BOQ for Wet stack study, however we have been provided with the technical specifications in the tender documents which is contradictory. Please confirm	Wet stack study is not in the scope of bidder.
76	TCC	TCC Clause 3.1.2 : Chapter – III: FACILITIES IN THE SCOPE OF CONTRACTOR/	3.1.2For living purpose of the bidder:aOpen space for labour colonyContractor has to make his own arrangements for land (outside the plant), shelter and transportation of labours as per requirement.bLabour Colony with internal roads, sanitation, complying with statutory requirements Construction Plan shall be approved by BHEL	Labour colony is to be made by the contractor at his own cost. There is no separate payment to be made to the contractor. There are many residential buildings available that have all amneties such as running water, toilets & kitchens that can be used by the manpower	In case, Bidder opts to use rental facilities (instead of constructing labour colony) available around Project site for their labour, the bidder is allowed to choose the same provided that it in

Corrigendum - 3 dated 14/02/2025 to CPC Tender No. BHEL / CPC / BARH / CHM / 25 / 075

Sl. No.	Reference Tender Document	Reference clause	Existing Provision	Bidder's query	BHEL's Clarification
		BHEL (SCOPE MATRIX)		being mobilized. These shall be better for the usage of the manpower. The Contract should not bar the contractor from providing better facilities to its manpower. We request you to please remove this clause as there is no extra payment being made and there are enough accommodations available near the plant that can be used.	compliance with statutory requirements and minimum facilities as per attached drawings.
77	TCC	TCC Clause 3.9.1 e : Chapter – III: FACILITIES IN THE SCOPE OF CONTRACTOR/ BHEL (SCOPE MATRIX)	Preparation of site construction / erection schedules and other input requirements as per Form- 14.	We request BHEL to facilitate the contractor with the access to the SDD portal	SDD portal is of BHEL Internal Data Management.
78	Major Highlights of Tender	Clause no. 2 pg. 01 of 03	Cement supply is in Bidder's scope.	We request provision of Cement Free of Cost for both Raft and Shell construction	Tender Conditions Shall Prevail
79	TCC	Clause no 8.2.16	Variation in Taxes & Duties: Any upward variation in GST shall be considered for reimbursement provided supply of goods and services are made within schedule date stipulated in the contract or approved extended schedule for the reason solely attributable to BHEL. However downward variation shall be subject to adjustment as per actual GST applicability. In case the Government imposes any new levy/tax on the output service/goods after price bid opening, the same shall be reimbursed by BHEL at actual. The reimbursement under this clause is restricted to the direct transaction between BHEL and its contractor only and within the contractual delivery period only. In case any new tax/levy/duty etc. becomes applicable after the date of Bidder's offer but before opening of the price Bid, the Bidder/Contractor must convey its impact on	We request you to please provide for variation in import duty of Titanium, C276	Tender Conditions Shall Prevail

Corrigendum - 3 dated 14/02/2025 to CPC Tender No. BHEL / CPC / BARH / CHM / 25 / 075

Sl. No.	Reference Tender Document	Reference clause	Existing Provision	Bidder's query	BHEL's Clarification
			his price duly substantiated by documentary evidence in support of the same before opening of price bid. Claim for any such impact after opening the price bid will not be considered by BHEL for reimbursement of tax or reassessment of offer.		

Note:

- 1) All other terms and conditions against this NIT shall remain unchanged.**
- 2) This corrigendum is to be submitted duly signed and stamped along with the Techno-commercial bid (Part- I).**

**for BHARAT HEAVY ELECTRICALS LTD
Dy Manager/ SCT- CPC**

PART-A							
Project: 1X660 MW BARH ST-I U#2 STANDALONE FGD CHIMNEY							
Summary (Revised Un-Priced Rate Schedule Rev-01)							
Sl. No.	Item Description	Quantity	Units	Quoted Currency in INR / Other Currency	BASIC TOTAL AMOUNT In Figures To be entered by the Bidder Rs. P	TOTAL AMOUNT (For taxes refer Chapter-VIII of TCC) Rs. P	TOTAL AMOUNT In Words
1	2	3	4	5	6	7	8
1	TOTAL PRICE FOR CONSTRUCTION WORK OF 01 NO 150M HEIGHT RCC SINGLE FLUE CHIMNEY COMPLETE IN ALL RESPECT INCLUDING CHIMNEY RCC WIND SHIELD, FABRICATION & ERECTION OF STEEL FLUE CANS, ERECTION OF SHOP FABRICATED STRUCTURAL PLATFORMS, INSTALLATION OF ELECTRICAL ITEMS IN CONFORMITY WITH THE APPROVED LAYOUT ETC TO COMPLETE THE CHIMNEY IN ALL RESPECT (BUT EXCLUDING PILING AND BOROSILICATE WORKS) OF CHIMNEY UNIT#2 FOR BARH SUPER THERMAL POWER PROJECT, STAGE I, BIHAR	1.00	Total Price	INR		-	
Total in Figures						-	
Quoted Rate in Words							
Instructions to the Bidders							
1	Bidders shall quote Total Price for the entire scope of work in Rupees in VOL II PRICE BID at BHEL E-procurement Portal. Any other entry elsewhere in the offer of the bidder shall be treated as Null and Void. The total value shall be automatically calculated on E-portal.						
2	Contract Value based on the price quoted by Bidder in Price Bid shall be as per Part-B.						
3	BHEL has fixed the % weightages as in "Part-B" for the amount of individual items of BOQ Cum Rate Schedule w.r.t. the total value quoted in price-bid.						
4	Based on the pre-fixed % weightages, amount of individual items shall be derived by BHEL. This amount shall not be rounded off.						
5	Based on the quantities of individual item and the amount arrived in Sl. No. 4 above, item rate of individual items shall be derived by BHEL. This item rate shall be rounded off up to two decimal places and shall be used to calculate the total amount of an item.						
6	Bidders to note that this is an 'Item rate contract'. Payment shall be made for the actual quantities of work executed at the Unit rate arrived at as per serial no. 5 above.						

PART-B	
PREAMBLE FOR REVISED BOQ CUM RATE SCHEDULE REV-01	
1	Details of the items in the BOQ Cum Rate Schedule shall be read in conjunction with the tender specifications, drawings and other documents and shall have precedence over any contrary statement mentioned anywhere in this document.
2	The work shall be carried out as per construction drawings, specifications, the description of the items in this schedule and/or Engineer's instructions, Drawings enclosed with these documents are only indicative giving some idea of the type of work involved. The layout, sizes and details of the building, structures and foundations shown in tender drawings may vary at a large extent during actual construction. Final drawings will be issued progressively during the execution of the work.
3	Items of work provided in this schedule but not covered in the specifications shall be executed strictly as per instructions of the Engineer.
4	Unless specifically mentioned otherwise in the contract, the contractor shall quote his rates for the finished items and shall provide for the complete cost towards fuel, tools, tackle, equipment, constructional plant, temporary works, labour materials, levies, taxes, transport, layout, repairs, rectification, maintenance till handing over, supervision, shops, establishments, services, temporary roads, revenue expenses, contingencies, overheads, profits and all incidental items not specifically mentioned but reasonably implied and necessary to complete the works according to the contract.
5	The rate shall also be inclusive of carrying out topography survey of site to establish levels and coordinates at suitable intervals, from existing grid levels and coordinates furnished by the owner, establish bench marks, setting out the location and levels of the proposed structures, constructions and making references, pillars and other identification marks etc. No separate payment will be made towards the same.
6	The quantities of the various items mentioned in the BOQ cum Rate Schedule are approximate and may vary up to any extent or be deleted altogether. The overall variation in contract value on execution shall be dealt as per GCC. Contractor has to obtain prior approval of BHEL/ Customer before procurement of bought out items/ building materials.
7	BHEL Engineer's decision shall be final and binding on the contractors regarding clarification of items in BOQ cum Rate schedule with respect to the other sections of the contract.
8	In case of any discrepancy between item description, relevant specification, clarification shall be sought at tender stage itself. Otherwise it shall be assumed that the contractor has quoted for the more stringent requirement.

PART-B						
Project: 1X660 MW BARH ST-I U#2 STANDALONE FGD CHIMNEY						
Revised BOQ Cum Rate Schedule Rev 01 (% WEIGHTAGE FOR AMOUNT OF INDIVIDUAL ITEMS W.R.T. THE TOTAL VALUE)						
TENDER NO.: BHEL/CPC/BARH/CHM/25/075						
WORK:-						
CONSTRUCTION WORK OF 01 NOS 150M HEIGHT RCC SINGLE FLUE CHIMNEY COMPLETE IN ALL RESPECT INCLUDING CHIMNEY RCC WIND SHIELD, FABRICATION & ERECTION OF STEEL FLUE CANS, ERECTION OF SHOP FABRICATED STRUCTURAL PLATFORMS, INSTALLATION OF ELECTRICAL ITEMS IN CONFORMITY WITH THE APPROVED LAYOUT ETC TO COMPLETE THE CHIMNEY IN ALL RESPECT BUT EXCLUDING PILING AND BOROSILICATE WORKS CHIMNEY UNIT#2 FOR AT BARH SUPER THERMAL POWER PROJECT, STAGE-I, BIHAR						
SL No.	Civil Works	Unit	Quantity	RATE (INR)= TOTAL VALUE * WEIGHTAGE /(QUANTITY) (ROUNDED OFF TO TWO PLACES AFTER DECIMAL)	AMOUNT (INR) RATE * QUANTITY	WEIGHTHAGES OF BOQ ITEMS
1	Earth work in excavation in all types of soil including ash which can be excavated by any means including setting out, levelling, dewatering (but excluding special type of dewatering viz. well point method, sump pump method, etc), dressing the sides & bottom, all lifts, ramming/compacting the excavated bottom, stacking, disposal of surplus excavated materials within a lead upto 1Km, spreading/levelling of disposed materials etc all complete for following depths below ground level, including all labour, equipments etc complete as per specification, drawing and as directed by engineer- in-charge (Measurement of excavation shall be paid as per actual quantity at site as per direction of Engineer in charge)					
a	Depth from ground level but not exceeding 2 m	cum	3500		₹ -	0.1786976242%
b	Depth exceeding 2 m but not exceeding 4 m	cum	3400		₹ -	0.2174294166%
c	Depth exceeding 4 m but not exceeding 6 m	cum	2350		₹ -	0.1878499798%
2A	Dewatering of ground water by well point method as per IS 9759 and any other special method for lowering ground water table which is required for excavation/ pile cap work etc all complete (Measurement of this item shall be paid as per actual excavated earth quantity at site from ground water table to bottom of PCC level as per direction of Engineer in charge)					
b	By sump pump method or any other special method for lowering ground water table	cum	5750		₹ -	0.5686926744%
2B	Providing and installing temporary steel sheet pile for earth protection during excavation / around foundations below ground level as per approved scheme / drawing including material, labour, equipment, consumable etc. complying all safety norms and removal of sheet pile after completion of foundation work all complete for following depths below ground level. [mode of measurement : Area shall be calculated on the basis of exposed sheet pile area between ground level and bottom of PCC below Raft / pile cap].					
2B.i	For excavated depth from ground level but not exceeding 5.5 m	SQM	150		₹ -	0.8363154009%
7	Earthwork in Back filling upto any depth below ground level around foundations, plinths, trenches, drains etc to proper grade and level in layers not exceeding 300mm compacted thickness using/with selected materials from compulsorily excavated earth available within a lead upto 1 Km and compacted as specified including re-excavation of stacked earth, watering, ramming/compaction by manual/mechanical means, dressing etc all complete for the following, including all labour, equipments etc complete as per specification, drawing and as directed by engineer- in-charge. [Measurement of Backfilling shall be paid as per excavation quantity after deduction for concrete & other buried items etc.]					
b	at least 90% maximum dry density as per IS-2720 (Part-VII)	cum	2750		₹ -	0.1219722158%
8	Earthwork in Back filling upto any depth below ground level around foundations, plinths, trenches, drains etc to proper grade and level in layers not exceeding 300 mm thickness using/with selected earth directly from excavation within a lead upto 1Km and compacted as specified including watering, ramming/compaction by manual/mechanical means, dressing etc all complete for the following, including all labour, equipments etc complete as per specification, drawing and as directed by engineer- in-charge. [Measurement of Backfilling shall be paid as per excavation quantity after deduction for concrete & other buried items etc.]					
b	at least 90% maximum dry density as per IS-2720 (Part-VII)	cum	275		₹ -	0.0101375651%
9	Extra over ST No. 1 and 3 to 8 for carriage of material/earth for every 500m or part thereof beyond an initial lead of 1km, including all labour, equipments etc complete as per specification, drawing and as directed by engineer- in-charge.					
b	Carriage for disposal of serviceable/unserviceable material/ earth	cum	100		₹ -	0.0006190433%
A11	Supplying and filling natural sand / sand manufactured from other than natural sources upto any depth below grade slab, under floors, around foundations, plinths etc. in layers not exceeding 300mm compacted thickness and compacted so as to achieve at least 80% relative density as per IS-2720 (Part-XIV) including spreading, watering, ramming/compaction by manual / mechanical means, dressing, royalty (if any), labour, equipments etc. all complete as per specification, drawing and as directed by engineer- in-charge.	cum	10		₹ -	0.0117335010%
12	Providing and Filling in grade slab, area paving, trenches, plinths and other underground structures with graded stone aggregate of size range 63 mm to 45 mm in layers not exceeding 200 mm in thickness including breaking of stone boulders to required sizes, filling the interstices with selected natural sand/sand manufactured from other than natural sources/moorum and compacting to 85 % of original volume of stone stack for all lifts etc. all complete as per specifications, drawings and instructions of the Engineer. Payment shall be made for the measurement of the volume of the compacted fill.	cum	417		₹ -	0.7028110867%
13	Providing and laying Nominal Mix plain cement concrete (M7.5) with graded aggregate (with maximum size of coarse aggregate not exceeding 40 mm) at all levels for all kinds of work like mass concrete, lean concrete, mudmat, filling etc. including labour, materials, equipment, handling, transporting, batching, curing, testing etc. all complete as per specifications, drawings and instructions of the Engineer. (Supply of Cement is in the scope of contractor)	cum	150		₹ -	0.4298912015%
14	Providing and laying design mix cement concrete with graded aggregate (maximum size of coarse aggregate not exceeding 20 mm) for reinforced concrete work at all levels for all kinds of work, including labour, materials, equipment, handling, transporting, batching, mixing, placing, levelling, compacting, curing, testing etc. and rendering or cleaning and finishing the exposed surface with cement mortar (1:3) to give smooth and even surface, all complete as per specifications, drawings and instructions of the Engineer, but excluding all formwork and reinforcing steel: (Supply of Cement is in the scope of contractor)					
i	For all works below ground level (excluding chimney shell)					
b	Grade M-30 (foundations, etc)	cum	5500		₹ -	20.5916199661%

PART-B						
Project: 1X660 MW BARH ST-I U#2 STANDALONE FGD CHIMNEY						
Revised BOQ Cum Rate Schedule Rev 01 (% WEIGHTAGE FOR AMOUNT OF INDIVIDUAL ITEMS W.R.T. THE TOTAL VALUE)						
TENDER NO.: BHEL/CPC/BARH/CHM/25/075						
WORK:-						
CONSTRUCTION WORK OF 01 NOS 150M HEIGHT RCC SINGLE FLUE CHIMNEY COMPLETE IN ALL RESPECT INCLUDING CHIMNEY RCC WIND SHIELD, FABRICATION & ERECTION OF STEEL FLUE CANS, ERECTION OF SHOP FABRICATED STRUCTURAL PLATFORMS, INSTALLATION OF ELECTRICAL ITEMS IN CONFORMITY WITH THE APPROVED LAYOUT ETC TO COMPLETE THE CHIMNEY IN ALL RESPECT BUT EXCLUDING PILING AND BOROSILICATE WORKS CHIMNEY UNIT#2 FOR AT BARH SUPER THERMAL POWER PROJECT, STAGE-I, BIHAR						
SL No.	Civil Works	Unit	Quantity	RATE (INR)= TOTAL VALUE * WEIGHTAGE /(QUANTITY) (ROUNDED OFF TO TWO PLACES AFTER DECIMAL)	AMOUNT (INR) RATE * QUANTITY	WEIGHTHAGES OF BOQ ITEMS
ii	For all other works					
a	Grade M-25 grade level slab, pit, trenches, drain etc.	cum	85		₹ -	0.3107444667%
b	Grade M-30 for chimney shell, corbel, external platforms, roof slab and any other components.	cum	40		₹ -	0.1668944415%
c	Grade M-35 for chimney shell, corbel, external platforms, roof slab and any other components.	cum	4300		₹ -	18.0880684765%
15	Providing and applying two coats of bitumen grade 85/25 as per IS 702 (@ 1.7kg/sqm) with 1% antistripping compound conforming to IS 6241 in foundation, shell, pedestal etc on concrete surfaces exposed to soil / ash including surface preparation etc. all complete as per specifications, drawings and instructions of the Engineer.	Sqm	2200		₹ -	0.2732197414%
16	Providing and placing steel reinforcements of High yield strength deformed TMT steel bars of grade Fe-500/Fe-500D/Fe-550/Fe-550D conforming to IS:1786 and IS 13920 (minimum elongation shall be 14.5%) , for reinforced concrete work, at all levels, for all kinds of work including transportation, cleaning, derusting, straightening, cutting, bending, binding in position with annealed wire and/or welding, providing concrete cover blocks, pins, separators, chairs, supports for reinforcement, etc. with all materials, labour, equipment, handling, testing, transportation to & from stores etc., preparation of bar bending schedules, all complete as per specification, drawing and as directed by engineer- in-charge. [TMT steel of grade Fe-500 /Fe 500D confirming to IS:1786 will be provided by BHEL free of cost]					
i	For works below ground level (excluding shell)					
a	High strength deformed bars	Mt	650		₹ -	3.5008975036%
ii	For works other than those under Sl. No. 16(i)					
a	Mild steel reinforcement bars	Mt	2		₹ -	0.0712913451%
b	High strength deformed bars	Mt	550		₹ -	4.1472172899%
17	Providing and fixing formwork of approved quality for cast-in-situ, plain or reinforced concrete works of any type and section (including curved surfaces and chimney shell) for all elevations, including labour, materials, equipment, waste of forms, shoring, strutting, scaffolding, staging, tying, nailing, caulking, bolting etc. and removal of form work and staging etc. all complete as per specifications, drawings and instructions of the Engineer.					
i	For works below ground level (excluding shell)	Sqm	1200		₹ -	0.3790487277%
ii	For works other than those under Sl. No. 17(i):- Providing and fixing formwork using slipform (inner and outer faces) for concreting in chimney for cast in situ, reinforced concrete works of any type and section for all elevations, including labour, materials, equipment, waste of forms, scaffolding, staging, tying, nailing, caulking, bolting, maintenance, dismantling etc. all complete as per specifications, drawings and instructions of Engineer in charge. (Area of inner face and outer face shall be measured separately.) Note:- To prevent surface problem in RCC Chimney Shell, 0.47 mm thick colour coated GI sheet should be used along with Slipform shutter plate as per direction of BHEL In-Charge. Mode of Measurement:- Total formwork quantity in chimney shell applicable to Slipform work as per specifications & drawings shall be jointly measured and certified. Certified quantity(SQM) to be paid in line to the unit rate of B17a) i), B17a) ii) & B17a) iii). (The slipform arrangement material shall be the property of contractor)					
a	Design, Engineering, Approval of Drawings, Providing & Installation of Slipform system as per approved drawings duly reviewed & vetted by approved Third Party/Engineering for chimney or silo or any other shell/structure work at site including all safety requirements/arrangements, installation of all supporting items like structural members, winch arrangement, wooden platforms, jacks(including testing by Third Party) & jack-rods, lighting arrangements, panels, passenger cage, nuts/bolts, manpower, all other arrangements necessary for concreting & material shifting, providing spares for smooth operation, dismantling, etc all complete. Quantity measured for 17 ii) a.1), 17 ii) a.2) & 17 ii) a.3) shall be same and shall be restricted to the quantity measured in 17 ii) a.3)					
a.1	For Mobilisation & Installation(Payment of the total certified quantity of the shell shall be made for mobilisation of slipform only after start of successful slipping as certified by Engineer in charge.)	Sqm	16000		₹ -	4.6056104467%
a.2	For Dismantling of the Slipform System(Payment of the total certified quantity of the shell shall be made only after complete dismantling of slipform as certified by Engineer in charge.)	Sqm	16000		₹ -	1.1552238668%
a.3	Slipping/Providing formwork at inner and outer faces of wind shield with slip form shuttering with slipform arrangement. (Cost for design, mobilisation, installation & dismantling of slipform shall be paid separately in Item No 17 ii)a.1 & 17 ii)a.2 and cost for slipping/providing & maintenance of slipform work to be paid in this item) Measurement for payment to be done progressively as per actual slipping executed at site.	Sqm	16000		₹ -	5.7607264192%
b	All other components of the superstructure including slabs, beams, columns, walls, enclosures, mini shells, external platforms, corbels, other shell attachments, chases/recesses in shell etc.	Sqm	200		₹ -	0.1306244365%

PART-B						
Project: 1X660 MW BARH ST-I U#2 STANDALONE FGD CHIMNEY						
Revised BOQ Cum Rate Schedule Rev 01 (% WEIGHTAGE FOR AMOUNT OF INDIVIDUAL ITEMS W.R.T. THE TOTAL VALUE)						
TENDER NO.: BHEL/CPC/BARH/CHM/25/075						
WORK:-						
CONSTRUCTION WORK OF 01 NOS 150M HEIGHT RCC SINGLE FLUE CHIMNEY COMPLETE IN ALL RESPECT INCLUDING CHIMNEY RCC WIND SHIELD, FABRICATION & ERECTION OF STEEL FLUE CANS, ERECTION OF SHOP FABRICATED STRUCTURAL PLATFORMS, INSTALLATION OF ELECTRICAL ITEMS IN CONFORMITY WITH THE APPROVED LAYOUT ETC TO COMPLETE THE CHIMNEY IN ALL RESPECT BUT EXCLUDING PILING AND BOROSILICATE WORKS CHIMNEY UNIT#2 FOR AT BARH SUPER THERMAL POWER PROJECT, STAGE-I, BIHAR						
SL No.	Civil Works	Unit	Quantity	RATE (INR)= TOTAL VALUE * WEIGHTAGE / (QUANTITY) (ROUNDED OFF TO TWO PLACES AFTER DECIMAL)	AMOUNT (INR) RATE * QUANTITY	WEIGHTAGES OF BOQ ITEMS
18	Providing and fixing formwork in shell openings and pockets (above 0.1 sq.m surface area) including cutting, formation of shapes and all other operations required for making the required shape and size, removal of formwork, all complete as per specifications, drawings and instructions of the Engineer.	Sqm	150		₹ -	0.0979683274%
19	Providing and placing in position at all levels, building paper (kraft paper), as per IS:1397, between concrete surfaces including the cost of labour, material, etc. complete as per drawings and instruction of the Engineer.	Sqm	50		₹ -	0.0004034796%
20	Providing and installing, at all levels, bitumen impregnated fibre boards, 12 mm thick, conforming to IS:1838, as joint filler at joints in concrete, including nailing, coating of both faces with coal tar pitch/bitumen, including the cost of all labour, material and equipments etc., complete as per drawings, specifications and instructions of the Engineer.	Sqm	16		₹ -	0.0045296169%
21	Providing and filling, at all levels, bitumen sealing compound (hot applied type) conforming to IS:1834, for sealing gaps and joints in concrete, including cleaning, mixing, heating, pouring or injecting, application of primer, cost of all labour, material and equipments etc., complete as per drawings, specifications and instructions of the Engineer.	Kg	480		₹ -	0.0271310912%
22	Supplying, fabricating, erecting and installing miscellaneous steel parts to be embedded/cast in concrete (like staircase embedments, corbel face plates, etc) at all positions and levels including preparation of fabrication drawings, galvanization as per IS:4736 (The minimum weight for galvanizing shall be 610 g/sq.m and shall comply with relevant IS Codes), including the cost of all labour, materials and equipments for setting materials in concrete, grouting, welding, bolts & bolting, expansion anchors, drilling, cutting, etc. complete as per drawings and specification.	Mt	3		₹ -	0.1402348257%
B23	Supply, fabrication (shop fabricated as per specification) and erection of structural steel of grade E 250 in rolled/ built up section (Rolled sections shall be of grade designation E250, Quality A/BR, Semi-killed/ killed conforming to IS 2062. All steel plates shall be of Grade designation E250, Quality BR (fully killed), conforming to IS 2062 and shall be tested for impact resistance at room temperature. Plates beyond 12mm thickness and up to 40mm thickness shall be normalized rolled. Plates beyond 40mm thickness shall be vacuum degassed & furnace normalised and shall also be 100% ultrasonically tested as per ASTM –A578 level B-S2.) in chimney platform, staircase, columns, beams, struts, monorails, stays, safety chains, ladders, MS gratings, gantry girders, roof trusses, portals, laced purlins, space frames, hangers, wall beams, sheeting runners, brackets, stiffeners, stub columns, bracings, cleats, base plates, splice plates, gussets, end plates, steel frame grid over false ceiling, walkway platforms, ladders, stairs, stringers, treads, landings, decking and seal plates, galleries etc including blast cleaning, providing & applying primer, providing and applying intermediate, final and final finish coat of paint (blast cleaning, primer and paint shall be paid separately as per item no C23, D23 & E23), connection design, preparation of fabrication drgs and appointment of a separate agency for review and approval of fabrication drgs in consultation with BHEL, straightening, cutting, bending, rolling, grinding, machining, drilling, welding, electrodes and other consumables, alignment, true to line, level, plumb & dimension, erection bolts & nuts (weight of erection bolts and nuts not payable), assembly, edge preparation, preheating / post heating if required, testing of welders, inspection of welds, visual inspection, non destructive and special testing, rectification and correction of defective welding works, production test plate, inspection and testing, erection scheme, protection against damage in transit, stability of structures, installation of temporary structures, setting column bases, surface preparation by means of manual or mechanical power tools as per IS:1477 part 1, touch-up painting, rectification, dismantling and removal of all temporary structures (weight of temporary structures not payable), etc all complete as per drawing and specifications. (Final measurement of total qty of this item shall be restricted to net erected quantity at site)	Mt	185		₹ -	9.3820298735%
C23	Extra over ST NO. A23, B23, A24 & 27 for blast cleaning of steel structures to near white metal surface conforming to Sa 2 ½ finish of ISO 8501-1 with surface profile 40-60 Micron and providing and applying two component moisture curing zinc (ethyl) silicate primer coat (having minimum 80% of metallic Zinc content in dry film, solid by volume minimum 60% ±2%) of minimum 70 micron DFT including the cost of all labour, material, equipments, protection of surface and cleaning, scaffolding, touch-up painting etc., complete as per drawings, specifications and instructions of the Engineer. Zinc dust composition and properties shall be Type-II as per ASTM D520-00. Primer coat shall be applied in Shop immediately after blast cleaning by airless spray technique.	Mt (of steel)	185		₹ -	0.2750997540%
D23	Extra over ST NO. A23, B23, A24 & 27 for providing and applying (by airless spray technique) intermediate coat of two component polyamide cured epoxy with MIO Content (containing lamellar MIO minimum 30% on pigment, solid by volume minimum 80% ±2%) of minimum 100 micron DFT after an interval of minimum 24 hours (from the application of primer coat) and of approved make including the cost of all labour, material, equipments, protection and cleaning, scaffolding, touch-up painting etc. all complete as per drawing and specifications.	Mt (of steel)	185		₹ -	0.2634461846%
E23	Extra over ST NO. A23, B23, A24 & 27 for providing and applying Finish coat of two-pack aliphatic Isocyanate cured acrylic finish paint (solid by volume minimum 55% ±2%) with Gloss retention (SSPC Paint Spec No 36, ASTM D 4587, D 2244, D 523) of Level 2 (after minimum 1000 hours exposure, Gloss loss less than 30 and colour change less than 2.0 ΔE) and minimum 70 micron DFT over steel sections already having intermediate coats, including the cost of all labour, material, equipments, protection and cleaning, scaffolding etc. all complete as per drawing and specifications. This coat shall be applied after an interval of minimum 24 hours (from the application of sealer coat) and within six (6) months (from the completion of Intermediate coat). Colour and shade of the coat shall be as approved by the Employer.	Mt (of steel)	185		₹ -	0.2172785219%
A24	Supplying, fabrication, erection and alignment of factory made chequered plate conforming to IS 3502 (minimum 6 mm o/p) in platforms, staircases with edge binding strips and anti-skid nosing in treads etc. including fixing clamps, fittings, fixtures, grinding, drilling, welding, edge preparation, connection design, preparation of fabrication drgs and appointment of a separate agency for review and approval of fabrication drgs in consultation with BHEL etc. all complete as per drawing and specification.	Mt	25		₹ -	1.1530825067%

PART-B						
Project: 1X660 MW BARH ST-I U#2 STANDALONE FGD CHIMNEY						
Revised BOQ Cum Rate Schedule Rev 01 (% WEIGHTAGE FOR AMOUNT OF INDIVIDUAL ITEMS W.R.T. THE TOTAL VALUE)						
TENDER NO.: BHEL/CPC/BARH/CHM/25/075						
WORK:-						
CONSTRUCTION WORK OF 01 NOS 150M HEIGHT RCC SINGLE FLUE CHIMNEY COMPLETE IN ALL RESPECT INCLUDING CHIMNEY RCC WIND SHIELD, FABRICATION & ERECTION OF STEEL FLUE CANS, ERECTION OF SHOP FABRICATED STRUCTURAL PLATFORMS, INSTALLATION OF ELECTRICAL ITEMS IN CONFORMITY WITH THE APPROVED LAYOUT ETC TO COMPLETE THE CHIMNEY IN ALL RESPECT BUT EXCLUDING PILING AND BOROSILICATE WORKS CHIMNEY UNIT#2 FOR AT BARH SUPER THERMAL POWER PROJECT, STAGE-I, BIHAR						
SL No.	Civil Works	Unit	Quantity	RATE (INR)= TOTAL VALUE * WEIGHTAGE /(QUANTITY) (ROUNDED OFF TO TWO PLACES AFTER DECIMAL)	AMOUNT (INR) RATE * QUANTITY	WEIGHTHAGES OF BOQ ITEMS
25	Providing and fixing in positing of high strength structural bolts (of property class 8.8 and product grade 'C' as per IS: 1367) and conforming to IS: 3757 and high strength structural hardened and tempered nuts (of property class '8' as per IS:1367) conforming to IS:6623 with hardened and tempered washers as per IS:6649, up to and inclusive of 39 mm diameter and upto 1200 mm long for structural steel work including the cost of all labour, material and equipment, transporting, lifting to all heights, setting in place, cutting, grinding, drillings, testing, etc. complete as per drawings and specifications.	Quintal	50		₹ -	0.3989026207%
A25	Providing and fixing in positing of high strength structural bolts (of property class 10.9 and product grade 'C' as per IS: 1367) and conforming to IS: 3757 and high strength structural hardened and tempered nuts (of property class '8' as per IS:1367) conforming to IS:6623 with hardened and tempered washers as per IS:6649, up to and inclusive of 39 mm diameter and upto 1200 mm long for structural steel work including the cost of all labour, material and equipment, transporting, lifting to all heights, setting in place, cutting, grinding, drillings, testing, etc. complete as per drawings and specifications.	Quintal	12		₹ -	0.1053102919%
B25	Providing and fixing in position (for liner supporting hangers) of precision bolts of property class 8.8 conforming to is:1367 with yield strength not less than 700 mpa. and nuts of property class 8s conforming to is:6623 with hardened and tempered washers as per IS:6649 etc. up to and inclusive of 36 mm diameter and upto 300 mm long for structural steel work including the cost of all labour, material and equipment, transporting, lifting to all heights, setting in place, cutting, grinding, drillings, testing, etc. complete as per drawings and specifications. (The material specifications for nuts and bolts shall be 40 cr4mo3 conforming to is:4367. bolts shall be fixed in close tolerance holes with an overall diameter equal to the nominal bolt diameter +0.15mm. - 0.00mm.)	Quintal	8		₹ -	0.0638244193%
A26	Providing, fabricating and erecting at all levels, flues complete with all bends, flanges, stiffeners, all other internal and external flue attachments, support system, staying system, collars, minishell, cap, access manholes and gas sampling ports alongwith gaskets, cover plates, pipes, bends, fittings, condensate collection and withdrawal arrangement in line with gas-flow-model study report and any other appurtenances like seal pot etc. as required including material, equipment, transporting, lifting to all heights, setting in place, cutting, grinding, rolling, edge preparation, drilling, bending, electrodes and other consumables, alignment, erection bolts and bolting, welding, preheating and post-heating for welding, inspection, required testing, rectification and correction of defective works etc. and other required accessories, connection design & preparation of fabrication drgs and appointment of a separate agency for review and approval of fabrication drgs in consultation with BHEL, all complete as per specifications and drawings.					
i)	Components made of structural steel of grade E250 conforming to IS:2062 [Structural steel of grade E250 conforming to IS:2062 will be provided by BHEL free of cost]	MT	275		₹ -	5.6897325003%
vi)	Components made of titanium (Grade 2 as per ASME B265).	MT	3		₹ -	3.3386675987%
vii)	Components made of C276.	KG	400		₹ -	0.7784427168%
ix)	Components made of SS of grade A316L.	KG	50		₹ -	0.0111466012%
x)	Components made of acid resistant FRP	KG	1550		₹ -	0.7220279540%
C26	Supply & application including blast cleaning of outer surface of steel flue and stiffner to near white metal surface conforming to Sa 2 ½ finish of ISO 8501-1 with surface profile 40-60 Micron and providing two component moisture curing zinc (ethyl) silicate primer coat (having minimum 80% of metallic Zinc content in dry film, solid by volume minimum 60% ±2%) of minimum 70 micron DFT including the cost of all labour, material, equipments, protection of surface and cleaning, scaffolding, touch-up painting etc., complete as per drawings, specifications and instructions of the Engineer	Sqm	3900		₹ -	0.6539390319%
D26	Providing and applying (by airless spray technique) on outer surface of steel flue and stiffner, an intermediate coat of two component polyamide cured epoxy with MIO Content (containing lamellar MIO minimum 30% on pigment, solid by volume minimum 80% ±2%) of minimum 100 micron DFT after an interval of minimum 24 hours (from the application of primer coat) and of approved make including the cost of all labour, material, equipments, protection and cleaning, scaffolding, touch-up painting etc. all complete as per drawing and specifications.	Sqm	3900		₹ -	0.4334726166%
E26	Providing and applying on outer surface of steel flue and stiffner, Finish coat of two-pack aliphatic Isocyanate cured acrylic finish paint (solid by volume minimum 55% ±2%) with Gloss retention (SSPC Paint Spec No 36, ASTM D 4587, D 2244, D 523) of Level 2 (after minimum 1000 hours exposure, Gloss loss less than 30 and colour change less than 2.0 ΔE) and minimum 70 micron DFT over steel sections already having intermediate coats, including the cost of all labour, material, equipments, protection and cleaning, scaffolding etc. all complete as per drawing and specifications. This coat shall be applied after an interval of minimum 24 hours (from the application of sealer coat) and within six (6) months (from the completion of Intermediate coat). Colour and shade of the coat shall be as approved by the Employer.	Sqm	3900		₹ -	0.4334726166%
27	Supply, fabrication and installation at various locations and elevations of the chimney system the following miscellaneous mild steel items complete with the cost of all labour, material and equipment, transporting, lifting, setting in place, cutting, grinding, drilling, welding, bolts and bolting, anchor fasteners and anchoring, priming, painting, grouting, connection design, preparation of fabrication drgs and appointment of a separate agency for review and approval of fabrication drgs in consultation with BHEL etc. complete as per drawings and specifications:					
a	Mild steel ladders with cage, hood access hatch, louvers, bird screens, hood drain basin covers and other miscellaneous mild steel items not specifically mentioned.	Mt	9		₹ -	0.4325946810%
b	32/40 mm nominal bore medium class tubular hand railing for stair case and internal and external platforms. Payment breakup: a) For Supply 60%, b) Fabrication, Erection, Alignment, all complete-40%	Mt	13		₹ -	0.7041630153%

PART-B						
Project: 1X660 MW BARH ST-I U#2 STANDALONE FGD CHIMNEY						
Revised BOQ Cum Rate Schedule Rev 01 (% WEIGHTAGE FOR AMOUNT OF INDIVIDUAL ITEMS W.R.T. THE TOTAL VALUE)						
TENDER NO.: BHEL/CPC/BARH/CHM/25/075						
WORK:- CONSTRUCTION WORK OF 01 NOS 150M HEIGHT RCC SINGLE FLUE CHIMNEY COMPLETE IN ALL RESPECT INCLUDING CHIMNEY RCC WIND SHIELD, FABRICATION & ERECTION OF STEEL FLUE CANS, ERECTION OF SHOP FABRICATED STRUCTURAL PLATFORMS, INSTALLATION OF ELECTRICAL ITEMS IN CONFORMITY WITH THE APPROVED LAYOUT ETC TO COMPLETE THE CHIMNEY IN ALL RESPECT BUT EXCLUDING PILING AND BOROSILICATE WORKS CHIMNEY UNIT#2 FOR AT BARH SUPER THERMAL POWER PROJECT, STAGE-I, BIHAR						
SL No.	Civil Works	Unit	Quantity	RATE (INR)= TOTAL VALUE * WEIGHTAGE /(QUANTITY) (ROUNDED OFF TO TWO PLACES AFTER DECIMAL)	AMOUNT (INR) RATE * QUANTITY	WEIGHTHAGES OF BOQ ITEMS
d	Providing minimum 610 gsm Hot dipped galvanisation on mild steel parts as per specification.	Mt	11		₹ -	0.1918842272%
31	Supply, fabrication and installation at all levels, stainless plates (including stainless steel screws and fasteners) of grade AISI 316Land lead sheets beams and over the mild steel in the platform beam bearing, flue supports bearings, flue restraints brackets/ buffers etc. including the cost of all labour material & equipment, transporting, lifting to all heights, setting in place, cutting, grinding, drilling, welding of stainless steel using compatible & approved stainless steel electrodes, testing & machining flat and polishing the contact surfaces of stainless steel, coating the polished surfaces with silicone grease, etc., complete as per drawings and specifications.					
a	Stainless steel components.	kg	110		₹ -	0.0273284028%
b	Lead Sheets.	Kg	45		₹ -	0.0058134440%
34	Providing, laying and packing, at all levels, asbestos ropes at expansion joints including the cost of all labour material, etc. complete as per drawing and specifications.					
b	12 mm (diameter) at expansion joints between linig segments.	Rm	200		₹ -	0.0195436969%
35	Providing and installing, at all levels, resin bonded rock wool insulation slabs of density not less than 100 kg/cu.m with an installed thickness of not less than 100 mm, on the outside surface of clad steel/titanium flue liners and wherever as directed by the Engineer, in two layers (each 50 mm thick) including the cost of all labour, material and equipment, transporting, lifting to all heights, etc., inclusive of plated or galvanised accessories such as pins/studs/anchors/wire netting, speed washers, tying wires, etc. welding of pins/studs to steel surfaces or embedding of pins/studs/anchors in concrete surfaces, fixing, cutting, cutting, lapping, binding, testing, etc. complete as per drawings and specifications.	Sqm	5		₹ -	0.0026086135%
36	Providing and packing, at all levels, loose rock wool insulation to a density not less than 100 kg/cu.m between the insulated minishells and brick liners at expanjoints between the lining segments and wherever as directed by the Engineer including the cost of all labour, material and equipment, filling, ramming, testing, etc. complete as per drawings and specifications.	Cum	1		₹ -	0.0022975656%
40	Providing and painting, with epoxy phenolic coating system in three coats having 220 microns DFT over the external surfaces of chimney shell and wherever as required at all elevation in alternate bands of 'signal red' and 'bright white' colours including surface preparation, primer etc so as to give a good finish all complete as per drawing and specification. The epoxy phenolic coating system shall be as follows:- All concrete surfaces shall be provided with two component transparent polyamide cured epoxy sealer coating (having solid by volume minimum 40% ±2%) of minimum 50 micron DFT to be applied over cleaned surface in multiple coats. Surface to be coated shall be absolutely dry, clean and dust free. Sealer coat shall be followed with the application of Intermediate coat of epoxy phenolic coating (solid by volume minimum 63%) of minimum 100 micron DFT. This coat shall be applied after an interval of minimum 24 hours (from the application of primer coat) by airless spray technique. Intermediate coat shall be followed with the application of finish coat of two-pack aliphatic Isocyanate cured acrylic finish paint (solid by volume minimum 55% ±2%) with Gloss retention (SSPC Paint Spec No 36, ASTM D 4587, D 2244, D 523) of Level 2 (after minimum 1000 hours exposure, Gloss loss less than 30 and colour change less than 2.0 ΔE) and minimum 70 micron DFT. This coat shall be applied after an interval of minimum 10 hours and within six (6) months (from the completion of Intermediate coat). Colour and shade of the coat shall be as approved by the Engineer-in charge.	Sqm	8000		₹ -	2.3313612381%
41	Providing and painting, with epoxy phenolic coating system in three coats having 220 microns DFT over the inside surface of chimney shell above roof/ horizontal surface of shell at top/underside of concrete roof slab and wherever as required at all elevation including surface preparation, primer etc so as to give a good finish all complete as per drawing and specification. The epoxy phenolic coating system shall be as follows:- All concrete surfaces shall be provided with two component transparent polyamide cured epoxy sealer coating (having solid by volume minimum 40% ±2%) of minimum 50 micron DFT to be applied over cleaned surface in multiple coats. Surface to be coated shall be absolutely dry, clean and dust free. Sealer coat shall be followed with the application of Intermediate coat of epoxy phenolic coating (solid by volume minimum 63%) of minimum 100 micron DFT. This coat shall be applied after an interval of minimum 24 hours (from the application of primer coat) by airless spray technique. Intermediate coat shall be followed with the application of finish coat of two-pack aliphatic Isocyanate cured acrylic finish paint (solid by volume minimum 55% ±2%) with Gloss retention (SSPC Paint Spec No 36, ASTM D 4587, D 2244, D 523) of Level 2 (after minimum 1000 hours exposure, Gloss loss less than 30 and colour change less than 2.0 ΔE) and minimum 70 micron DFT. This coat shall be applied after an interval of minimum 10 hours and within six (6) months (from the completion of Intermediate coat). Colour and shade of the coat shall be as approved by the Engineer-in charge.	Sqm	250		₹ -	0.0773062390%
43	Proving and laying over the chimney roof, a composite acid and heat protection treatment including providing of slopes for roof drainage including the cost of all labour, material and equipment, etc., complete as required for preparing the roof concrete, laying under bed of plain cement concrete screed to slopes, preparation of screed surface for painting, painting the screed surface with black bituminous paint, applying bitumenmastic in layers, laying acid resisting(A/R) mortar bed and laying 75 mm thick acid resisting(A/R) bricks with A/R mortar, curing, pointing(with phenolic based A/R cement), protection and cleaning, finishing, etc., complete as per drawing and specifications.	Sqm	170		₹ -	0.2591250419%
44	Providing, fitting& fixing, outlet and overflow, cast iron roof drain heads (with gratings) in chimney roof including sockets, adapters, brackets, hangers, supports, etc., casting-in and jointing to 150 mm nominal bore rainwater pipes, grouting, etc. including the cost of all labour material and equipement, transporting, lifting, setting in place, painting, etc. complete as per drawing and specifications.	Each	4		₹ -	0.0182342922%

PART-B						
Project: 1X660 MW BARH ST-I U#2 STANDALONE FGD CHIMNEY						
Revised BOQ Cum Rate Schedule Rev 01 (% WEIGHTAGE FOR AMOUNT OF INDIVIDUAL ITEMS W.R.T. THE TOTAL VALUE)						
TENDER NO.: BHEL/CPC/BARH/CHM/25/075						
WORK:-						
CONSTRUCTION WORK OF 01 NOS 150M HEIGHT RCC SINGLE FLUE CHIMNEY COMPLETE IN ALL RESPECT INCLUDING CHIMNEY RCC WIND SHIELD, FABRICATION & ERECTION OF STEEL FLUE CANS, ERECTION OF SHOP FABRICATED STRUCTURAL PLATFORMS, INSTALLATION OF ELECTRICAL ITEMS IN CONFORMITY WITH THE APPROVED LAYOUT ETC TO COMPLETE THE CHIMNEY IN ALL RESPECT BUT EXCLUDING PILING AND BOROSILICATE WORKS CHIMNEY UNIT#2 FOR AT BARH SUPER THERMAL POWER PROJECT, STAGE-I, BIHAR						
SL No.	Civil Works	Unit	Quantity	RATE (INR)= TOTAL VALUE * WEIGHTAGE /(QUANTITY) (ROUNDED OFF TO TWO PLACES AFTER DECIMAL)	AMOUNT (INR) RATE * QUANTITY	WEIGHTHAGES OF BOQ ITEMS
45	Providing, fitting and fixing rainwater pipes at all levels internally from the chimney roof to ground level upto the hood drain basin including shoes, bends, junctions, flanges,hoppers, sockets, adaptors, brackets, hangers, supports, anchor fasteners, spacers, pipe sleeve through shell, silicon or vulcanised butyl sealant, foam backing material, jointing, socketing, grouting, caulking, primer and finish painting etc. complete including the cost of all labour, material and equipment, complete as per drawing and specifications:					
a	150 mm nominal bore cast iron pipes.	Rm	32		₹ -	0.0513602583%
b	150 mm nominal bore medium class galvanised mild steel pipes.	Rm	280		₹ -	0.2473784362%
46	Providing and laying 50 mm thick cement concrete flooring (comprising of 12 mm thick mettalic concrete hardener topping over 38 mm thick under bed of concrete) over the grade level slab inside the chimney, including the cost of all labour, material and equipment, etc. complete as required for preparation of base, laying underbed and topping, finishing, rounding of edges, corners and junctions, curing, testing, etc. complete as per drawing and specifications.	Sqm	360		₹ -	0.1239502772%
A47	Supplying, fabricating and installing electrically operated steel roll-up door and grilled ventilation at chimney base (total opening size of approx. 75 square m in which rolling shutter size will be approx. 4X5 m and remaining area covered with grill for ventilation), with all hardware and mechanisms, fittings and fixtures, locking arrangements, frames, fasteners, gear handle arrangement for standby manual operation, all electrical accessories such as motors, control systems, cables, etc. including connection design, preparation of fabrication drgs and appointment of a separte agency for review and approval of fabrication drgs in consultation with BHEL, cost of all labour, material and equipment, fixing in position, grouting primer and finish painting, testing, etc., complete as per drawing and specifications.	Sqm	75		₹ -	0.1591706733%
48	Supplying, fabricating and installing at any level and location, mild steel, double plate, personnel access doors, in shell openings of approx. size 1.2m by 2.1m, complete with all fittings and fixtures, locking arrangements, frames, fasteners including connection design, preparation of fabrication drgs and appointment of a separte agency for review and approval of fabrication drgs in consultation with BHEL, cost of all labour, material and equipment, lifting to all heights, setting in place, grouting primer and finish painting, etc., complete as per drawing and specifications.	Each	1		₹ -	0.0125184161%
A49	Supplying, fabricating and installing SS 316L grade access hatch for approx opening size of 750mmx750mm in roof slab of chimney complete with locking arrangements, frames, fittings,fixtures and all mechanisms & accessories required for proper operation including connection design, preparation of fabrication drgs and appointment of a separte agency for review and approval of fabrication drgs in consultation with BHEL, all labour, painting etc. complete as per drawings and specifications.	Each	1		₹ -	0.1131894205%
50	Conducting load testing on girders for 1.25 times the full load, on ground , including provision of test bed and jacks, dial gauges and other supplies complete as per specification and drawings and approval of engineer in-charge.	Pair	1		₹ -	0.1431645483%
51	Providing & grouting of pocket holes, pipe sleeves and under base plates of structural steel work/ machinery/ pipe supporting structures including roughening of surface, cleaning, ramming, curing etc. all complete with Conbextra GP-1 or equivalent. (Cost of all material and cleaning of the pockets by compressed air shall be in the scope of the contractor).	Cum	1		₹ -	0.0103849093%
52	Providing & grouting of pocket holes, pipe sleeves and under base plate of structural steel work/ machinery/ pipe supporting structures including roughening of surface, cleaning, ramming, curing etc. all complete with mix 1:1:2 (1 cement : 1 coarse sand : 2 aggregate of 6 mm down graded stonechips) using non shrink admixture. (Cost of all material and cleaning the pocket by compressed air shall be in the scope of the contractor).	Cum	1		₹ -	0.0052851499%
53	Supplying and erecting after approval by Engineer a rack and pinion type Elevator of min 400 kg load carrying capacity, from ground upto top of chimney with landing at various platform level, including all fixtures and accessories, mandatory spares, etc complete as per spec. and drawings.	Lumpsum	1		₹ -	2.6011406301%
54	Designing, providing and fixing permanently color coated galvanised MS troughed metal sheet decking plate of approved colour over roof beam for cast-in-situ roof slab as per relevant IS code and Grade as per specification. Bare metal thickness(BMT) of deck plate shall be minimum 0.8mm with minimum trough depth of 44 mm of grade G250 as per AS1397/grade SS255 as per ASTM A653M/ grade S250GD as per EN 10326 with zinc coating to class Z275 and shall serve as permanent shuttering to the floor slab 175 mm thick measured over crest of metal decking & shall have adequate strength to support weight of green concrete and imposed loads of min 100 kg/sqm (for two span condition) during construction between beams as per manufacturer's recommendations/ calculations/ test certificates for approval including connection design & preparation of fabrication drgs and appointment of a separte agency for review and approval of fabrication drgs in consultation with BHEL, fixing of plates to beams, side lapping, end lapping including all labour, material (unless otherwise specified in BOQ/contract specification), equipment, transportation, handling, scaffolding, laps, hooks, washers, corner pieces etc. at all level as per specification, drawings and as directed by engineer - in - charge all complete. The sheet shall be permanently coated with silicon modified polyester(SMP silicon content 30%-50%) paint or super polyester paint of minimum 20 micron DFT on exposed surface over primer coat of minimum 5 micron(nominal) and minum 10 micron (nominal) SMP or super polyester paint over primer coat of minimum 5 micron (nominal) on other face. SMP and polyester paint system shall be of industrial finish of product type 4 of AS/NZ2728, including fixing of sheet to top flange of beam with drawn arc welding of headed shear anchor studs @ 260mm c/c in the trough and stich screws between two adjacent sheets and sealing with epoxy sealant.The shear anchor studs shall confirm to type B studs specified in AWS D1.1/D1.1M or equivalent as shear connector of 16 mm dia & 75 mm length manufactured from cold drawn round steel bars confirming to ASTM A 29 of grade designation 1010 through 1020 of standard quality with either semi killed or killed welded by drawn arc stud welding through metal deck sheet. Measurement of profile sheeting shall be of the plan area of roof covered by MS trough metal decking. (Supply and fixing of shear connectors shall be paid separately as per BOQ item no-55)	SQM	170		₹ -	0.1594647976%

PART-B						
Project: 1X660 MW BARH ST-I U#2 STANDALONE FGD CHIMNEY						
Revised BOQ Cum Rate Schedule Rev 01 (% WEIGHTAGE FOR AMOUNT OF INDIVIDUAL ITEMS W.R.T. THE TOTAL VALUE)						
TENDER NO.: BHEL/CPC/BARH/CHM/25/075						
WORK:-						
CONSTRUCTION WORK OF 01 NOS 150M HEIGHT RCC SINGLE FLUE CHIMNEY COMPLETE IN ALL RESPECT INCLUDING CHIMNEY RCC WIND SHIELD, FABRICATION & ERECTION OF STEEL FLUE CANS, ERECTION OF SHOP FABRICATED STRUCTURAL PLATFORMS, INSTALLATION OF ELECTRICAL ITEMS IN CONFORMITY WITH THE APPROVED LAYOUT ETC TO COMPLETE THE CHIMNEY IN ALL RESPECT BUT EXCLUDING PILING AND BOROSILICATE WORKS CHIMNEY UNIT#2 FOR AT BARH SUPER THERMAL POWER PROJECT, STAGE-I, BIHAR						
SL No.	Civil Works	Unit	Quantity	RATE (INR)= TOTAL VALUE * WEIGHTAGE /(QUANTITY) (ROUNDED OFF TO TWO PLACES AFTER DECIMAL)	AMOUNT (INR) RATE * QUANTITY	WEIGHTHAGES OF BOQ ITEMS
55	Providing and fixing shear anchor studs for fixing metal deck sheet to roof structural beams conforming to Type-B studs specified in AWS D1.1/D1.1M or equivalent as shear connector of 16mm diameter and 75mm length manufactured from cold drawn round steel bars conforming to the requirement of ASTM A 29, of grade designation 1010 through 1020, of standard quality with either semi-killed or killed, welded by Drawn Arc Stud Welding through metal deck sheet etc all complete including all labour, material (unless otherwise specified in BOQ/contract specification), equipment, transportation, handling, scaffolding, lops, hooks, washers, corner pieces etc. at all level as per specification, drawings and as directed by engineer - in - charge.	Quintal	1		₹ -	0.0147944936%
	ELECTRICAL WORKS (Design, Engineering, Supply, Installation, testing & commissioning of following items as per specification)					
E1	415V, 200A, 50kA for 1 sec 4 wire AC Emergency Lighting distribution board alongwith 100KVA (2 Nos.) lighting transformer (415/433 V, Dyn11, Z=4%, ±2x2.5% off ckt. Tap) with 2 nos. of SFU (TPN) incomers with auto changeover facility using contactors and 16 nos. 100A SFU (TPN) outgoing complete in all respects.	no.	1		₹ -	0.2309445913%
E2	Normal AC lighting panel outdoor type with degree of protection IP 55 with one no. 100A SFU (TPN) Incomer , 20 outgoing (16A SP MCBs)	no.	2		₹ -	0.1592905304%
E3	Emergency lighting panel outdoor type with degree of protection IP 55 with One no. of 100A SFU(TPN) incomer and 12 outgoing (16A, SP MCBs)	no.	2		₹ -	0.1320244724%
E4	Aviation lighting panel outdoor type with degree of protection IP 55 with one no. 100A SFU (TPN) Incomer , 8 outgoing 32A SFU (TPN), photodetector and timer circuit along with 100A contactor to control aviation lighting system.	no.	1		₹ -	0.0850324302%
E5	Aviation obstruction lights (mounted on door panel openable from interior) :					
a	Aviation obstruction lighting system shall conform to the requirements of the latest rules and regulations of the International Civil Aviation Organization (ICAO), National Airports Authority (NAA) and Directorate of Air Routes and Aerodromes (DARA). The type of aviation obstruction lighting system shall be of medium intensity aviation obstruction lights having an effective intensity of 2000 to 20,000 cd depending upon back ground illuminance. Obstacle lights shall have a day time effective intensity of minimum 20000 cd. The intensity of lights shall be 20000 cd ± 25% at twilight and shall reduce automatically to a night time intensity of 2000 cd ± 25% through the use of photo-cell. The obstacle lights shall flash simultaneously at a rate between 20 to 60 per minute.	no.	12		₹ -	1.6643621092%
E6	Aviation Distribution Board (ADB) with one 32A SFU (TPN) incomer and 8 nos. SP 20A MCB. Construction is same as Lighting Panel.	no.	1		₹ -	0.0833540900%
E7	Flood light type 120W(approx) LED luminaire with fitting (integrated /retrofitted LED lamp) having an integral driver.The luminaire efficacy shall not be less than 80 Lm/W.	no.	8		₹ -	0.1216909354%
E8	Well glass type 30W(approx) LED luminaire with fitting (integrated /retrofitted LED lamp) having an integral driver.The luminaire efficacy shall not be less than 80 Lm/W.	no.	75		₹ -	0.2252081321%
E9	Well glass type 70W(approx) LED luminaire with fitting (integrated /retrofitted LED lamp) having an integral driver.The luminaire efficacy shall not be less than 80 Lm/W.	no.	40		₹ -	0.2334326532%
E10	Well glass type 50W(approx) LED luminaire with fitting (integrated /retrofitted LED lamp) having an integral driver.The luminaire efficacy shall not be less than 80 Lm/W.	no.	25		₹ -	0.1130230273%
E11	63Amp welding switch socket with plug & other Mounting accessories	no.	10		₹ -	0.0771395423%
E12	3 pin, 1 ph, 240V, 20Amp. Industrial Power sockets complete with plug Switches etc.	no.	10		₹ -	0.0257112252%
E13	Al conductor, HR PVC insulated, Armoured, PVC inner sheath,PVC outer sheath, FRLS type 1100V grade conforming to IS-1554 Part I.					
a	3½ C x95mm ² Al for connection between ACDB/ELDB/ welding sockets	Mtrs.	1500		₹ -	0.6326953260%
b	3½ Cx35mm ² Al for Lighting panel incoming supply	Mtrs.	1000		₹ -	0.2142240579%
c	4C x16mm ² Al for connection between ALP/ADB/Aviation Lights	Mtrs.	250		₹ -	0.0448879468%
b	4C x 2.5mm ² Cu Control cable for Aviation lighting system	Mtrs.	500		₹ -	0.0800373125%
E14	Double compression type cable gland (heavy duty, brass machine finished conforming to BS:6121) and tinned copper solderless crimping type lug for above cables.	nos	30		₹ -	0.0027513037%
E15	Cu conductor, HR-PVC insulated, PVC inner sheath,PVC outer sheathed and FRLS type 1100V grade conforming to IS-1554 Part I.					
a	2.5 mm ²	Mtrs.	2000		₹ -	0.0688994777%
b	4.0 mm ²	Mtrs.	5000		₹ -	0.2992492322%
E16	GI pipe conduit with minimum 25 mm dia with GI junction boxes, GI pull boxes (Size 200x200x100mm of 16 SWG sheet steel for junction & pull boxes) & accessories etc. complete in all respects.	Mtrs.	1800		₹ -	0.1880961136%
E17	PVC coated Flexible steel conduit 25mm dia with accessories	Mtrs.	100		₹ -	0.0029924923%
E18	Lightning protection Air terminal : Lead coated copper material of 20 mm dia & 3 metre long.	no.	6		₹ -	0.0445996039%
E19	50x6 Lead Coated GI Strip for coronal band on flue and top platform	Mtrs.	100		₹ -	0.0074100880%
E20	Electrical equipment earthing materials including down conductors 50x6 GI Strip	Mtrs.	700		₹ -	0.1795472915%
E21	Electrical equipment earthing materials including down conductors 25x3 GI Strip	Mtrs.	500		₹ -	0.0717238348%
E22	8 SWG GI wire for equipment earthing	Mtrs.	1500		₹ -	0.0603398662%

PART-B						
Project: 1X660 MW BARH ST-I U#2 STANDALONE FGD CHIMNEY						
Revised BOQ Cum Rate Schedule Rev 01 (% WEIGHTAGE FOR AMOUNT OF INDIVIDUAL ITEMS W.R.T. THE TOTAL VALUE)						
TENDER NO.: BHEL/CPC/BARH/CHM/25/075						
WORK:- CONSTRUCTION WORK OF 01 NOS 150M HEIGHT RCC SINGLE FLUE CHIMNEY COMPLETE IN ALL RESPECT INCLUDING CHIMNEY RCC WIND SHIELD, FABRICATION & ERECTION OF STEEL FLUE CANS, ERECTION OF SHOP FABRICATED STRUCTURAL PLATFORMS, INSTALLATION OF ELECTRICAL ITEMS IN CONFORMITY WITH THE APPROVED LAYOUT ETC TO COMPLETE THE CHIMNEY IN ALL RESPECT BUT EXCLUDING PILING AND BOROSILICATE WORKS CHIMNEY UNIT#2 FOR AT BARH SUPER THERMAL POWER PROJECT, STAGE-I, BIHAR						
SL No.	Civil Works	Unit	Quantity	RATE (INR)= TOTAL VALUE * WEIGHTAGE /(QUANTITY) (ROUNDED OFF TO TWO PLACES AFTER DECIMAL)	AMOUNT (INR) RATE * QUANTITY	WEIGHTAGES OF BOQ ITEMS
E23	Test links for 50x6 down conductors enclosed in 200mm X 200mm X 100mm GI box of 16SWG sheet steel.	no.	4		₹ -	0.0230166784%
E24	40mm dia MS rod for earthing of down conductor	Mtrs.	150		₹ -	0.0675445056%
E25	Earthpit with earthing electrode including brick chamber with cover, accessories etc. complete in all respect.	no.	4		₹ -	0.0142005393%
E26	Telephone socket with junction box etc. complete	no.	8		₹ -	0.0214660310%
E27	Telephone handsets complete	no.	8		₹ -	0.0051566984%
E28	Telephone cable of minimum 0.6 mm dia annealed high conductivity electro copper conductor, PVC insulated, twisted, PVC tape wrapped, screened, tip corded, PVC sheathed, confirming to relevant ITD (Indian Telephones department) specification					
	a) 24 pairs	Mtrs.	300		₹ -	0.1034550878%
	b) 2 pairs	Mtrs.	100		₹ -	0.0020425733%
E29	GS cable trays. Cable trays shall be of ladder type constructed of minimum 2 mm thick mild steel hot dip galvanise including cover, cabling material, accessories etc.					
a	600 mm wide	Mtrs.	200		₹ -	0.1459274394%
b	300 mm wide	Mtrs.	200		₹ -	0.0809400278%
c	150 mm wide	Mtrs.	400		₹ -	0.1360402785%
	Total Amount (INR)				₹ -	100.0000000000%

**DECLARATION REGARDING MINIMUM LOCAL CONTENT IN LINE WITH
REVISED PUBLIC PROCUREMENT (PREFERENCE TO MAKE IN INDIA), ORDER 2017 DATED
19TH JULY, 2024 AND SUBSEQUENT ORDER(S)**

(To be typed and submitted in the Letter Head of the Entity/Firm providing certificate as applicable)

To,

_____ (Name and Designation of Officer of BHEL inviting the Tender);

Bharat Heavy Electricals Limited,
Central Procurement Cell (CPC), 8th Floor, BHEL SADAN,
Plot No. 25, Sector-16A, Noida, U.P.-201301

Dear Sir,

Sub: Declaration reg. minimum local content in line with Public Procurement (Preference to Make in India), Order 2017-Revision, dated 19th July, 2024 and subsequent order(s).

Ref : 1) NIT/Tender Specification No:

2) All other pertinent issues till date

We hereby certify that the items/works/services offered by..... (specify the name of the organization here) has a local content of _____ % and this meets the local content requirement for '**Class-I local supplier**' / '**Class II local supplier**' ** as defined in Public Procurement (Preference to Make in India), Order 2017-Revision dated 19th July, 2024 issued by DPIIT and subsequent order(s).

The details of the location(s) at which the local value addition is made are as follows:

- | | |
|----------|----------|
| 1. _____ | 2. _____ |
| 3. _____ | 4. _____ |

Thanking you,
Yours faithfully,

**(Signature, Date & Seal of
Authorized Signatory of the Bidder)**

**** - Strike out whichever is not applicable.**

Note:

1. The Bidder to submit self-certification for the local content in the above format along with the techno-commercial offer.
2. In case the bidder's quoted value is in excess of Rs. 10 crores, the contractor shall be required to give local content certification duly certified by statutory auditor or cost auditor of the company (in the case of companies) or a practising cost accountant or practicing chartered accountant (in respect of suppliers other than companies) at the time of execution of project.
3. In case the contractor/supplier does not meet the stipulated requirement and the category of the supplier changes from Class -I to Class-II/Non-local or from Class-II to Non-local, a penalty up to 10% of the contract value may be imposed.
4. In the event of false declaration, actions as per the above order and as per BHEL Guidelines shall be initiated against the bidder.

INTEGRITY PACT

Between

Bharat Heavy Electricals Ltd. (BHEL), a company registered under the Companies Act 1956 and having its registered office at "BHEL House", Siri Fort, New Delhi - 110049 (India) hereinafter referred to as "The Principal", which expression unless repugnant to the context or meaning hereof shall include its successors or assigns of the ONE PART

and

_____, (description of the party along with address), hereinafter referred to as "The Bidder/ Contractor" which expression unless repugnant to the context or meaning hereof shall include its successors or assigns of the OTHER PART

Preamble

The Principal intends to award, under laid-down organizational procedures, contract/s for Tender No.: BHEL/CPC/BARH/CHM/25/075 for the work of ***"CONSTRUCTION WORK OF 01 NO 150M HEIGHT RCC SINGLE FLUE CHIMNEY COMPLETE IN ALL RESPECT INCLUDING CHIMNEY RCC WIND SHIELD, FABRICATION & ERECTION OF STEEL FLUE CANS, ERECTION OF SHOP FABRICATED STRUCTURAL PLATFORMS, INSTALLATION OF ELECTRICAL ITEMS IN CONFORMITY WITH THE APPROVED LAYOUT ETC TO COMPLETE THE CHIMNEY IN ALL RESPECT (BUT EXCLUDING PILING AND BOROSILICATE WORKS) OF CHIMNEY UNIT#2 FOR BARH SUPER THERMAL POWER PROJECT, STAGE I, BIHAR."***

The Principal values full compliance with all relevant laws of the land, rules and regulations, and the principles of economic use of resources, and of fairness and transparency in its relations with its Bidder(s)/ Contractor(s).

In order to achieve these goals, the Principal will appoint Independent External Monitor(s), who will monitor the tender process and the execution of the contract for compliance with the principles mentioned above.

Section 1- Commitments of the Principal

1.1 The Principal commits itself to take all measures necessary to prevent corruption and to observe the following principles: -

- 1.1.1 No employee of the Principal, personally or through family members, will in connection with the tender for, or the execution of a contract, demand, take a promise for or accept, for self or third person, any material or immaterial benefit which the person is not legally entitled to.
- 1.1.2 The Principal will, during the tender process treat all Bidder(s) with equity and reason. The Principal will in particular, before and during the tender process, provide to all Bidder(s) the same information and will not provide to any Bidder(s) confidential/ additional information through which the Bidder(s) could obtain an advantage in relation to the tender process or the contract execution.
- 1.1.3 The Principal will exclude from the process all known prejudiced persons.
- 1.2 If the Principal obtains information on the conduct of any of its employees which is a penal offence under the Indian Penal Code 1860 and Prevention of Corruption Act 1988 or any other statutory penal enactment, or if there be a substantive suspicion in this regard, the Principal will inform its Vigilance Office and in addition can initiate disciplinary actions.

Section 2 - Commitments of the Bidder(s)/ Contractor(s)

- 2.1 The Bidder(s)/ Contractor(s) commit himself to take all measures necessary to prevent corruption. He commits himself to observe the following principles during his participation in the tender process and during the contract execution.
- 2.1.1 The Bidder(s)/ Contractor(s) will not, directly or through any other person or firm, offer, promise or give to the Principal or to any of the Principal's employees involved in the tender process or the execution of the contract or to any third person any material, immaterial or any other benefit which he/ she is not legally entitled to, in order to obtain in exchange any advantage of any kind whatsoever during the tender process or during the execution of the contract.
- 2.1.2 The Bidder(s)/ Contractor(s) will not enter with other Bidder(s) into any illegal or undisclosed agreement or understanding, whether formal or informal. This applies in particular to prices, specifications, certifications, subsidiary contracts, submission or non-submission of bids or any other actions to restrict competitiveness or to introduce cartelization in the bidding process.
- 2.1.3 The Bidder(s)/ Contractor(s) will not commit any penal offence under the relevant Indian Penal Code (IPC) and Prevention of Corruption Act; further the Bidder(s)/ Contractor(s) will not use improperly, for purposes of competition or personal gain, or pass on to others, any information or document provided by the Principal as part of the business relationship, regarding plans, technical proposals and business details, including information contained or transmitted electronically.
- 2.1.4 Foreign Bidder(s)/ Contractor(s) shall disclose the name and address of agents and representatives in India and Indian Bidder(s)/ Contractor(s) to disclose their foreign principals or associates. The Bidder(s)/ Contractor(s) will, when presenting his bid, disclose any and all payments he has made, and is committed to or intends to make to agents, brokers or any other intermediaries in connection with the award of the contract.
- 2.2 The Bidder(s)/ Contractor(s) will not instigate third persons to commit offences outlined above or be an accessory to such offences.
- 2.3 The Bidder(s)/ Contractor(s) shall not approach the Courts while representing the matters to IEMs and will await their decision in the matter.

Section 3 - Disqualification from tender process and exclusion from future contracts

If the Bidder(s)/ Contractor(s), before award or during execution has committed a transgression through a violation of Section 2 above, or acts in any other manner such as to put his reliability or credibility in question, the Principal is entitled to disqualify the Bidder(s)/ Contractor(s) from the tender process or take action as per the separate "Guidelines on Banning of Business dealings with Suppliers/ Contractors", framed by the Principal.

Section 4 - Compensation for Damages

- 4.1 If the Principal has disqualified the Bidder from the tender process prior to the award according to Section 3, the Principal is entitled to demand and recover the damages equivalent Earnest Money Deposit/ Bid Security.
- 4.2 If the Principal has terminated the contract according to Section 3, or if the Principal is entitled to terminate the contract according to section 3, the Principal shall be entitled to demand and recover from the Contractor liquidated damages equivalent to 5% of the contract value or the amount equivalent to Security Deposit/ Performance Bank Guarantee, whichever is higher.

Section 5 - Previous Transgression

- 5.1 The Bidder declares that no previous transgressions occurred in the last 3 years with any other company in any country conforming to the anti-corruption approach or with any other Public Sector Enterprise in India that could justify his exclusion from the tender process.

- 5.2 If the Bidder makes incorrect statement on this subject, he can be disqualified from the tender process or the contract, if already awarded, can be terminated for such reason.

Section 6 - Equal treatment of all Bidders/ Contractors / Sub-contractors

6.1 The Principal will enter into agreements with identical conditions as this one with all Bidders and Contractors. In case of sub-contracting, the Principal contractor shall be responsible for the adoption of IP by his sub-contractors and shall continue to remain responsible for any default by his sub-contractors.

6.2 The Principal will disqualify from the tender process all bidders who do not sign this pact or violate its provisions.

Section 7 - Criminal Charges against violating Bidders/ Contractors /Subcontractors

If the Principal obtains knowledge of conduct of a Bidder, Contractor or Subcontractor, or of an employee or a representative or an associate of a Bidder, Contractor or Subcontractor which constitutes corruption, or if the Principal has substantive suspicion in this regard, the Principal will inform the Vigilance Office.

Section 8 -Independent External Monitor(s)

8.1 The Principal appoints competent and credible Independent External Monitor for this Pact. The task of the Monitor is to review independently and objectively, whether and to what extent the parties comply with the obligations under this agreement.

8.2 The Monitor is not subject to instructions by the representatives of the parties and performs his functions neutrally and independently. He reports to the CMD, BHEL.

8.3 The Bidder(s)/ Contractor(s) accepts that the Monitor has the right to access without restriction to all contract documentation of the Principal including that provided by the Bidder(s)/ Contractor(s). The Bidder(s)/ Contractor(s) will grant the monitor, upon his request and demonstration of a valid interest, unrestricted and unconditional access to his contract documentation. The same is applicable to Sub-contractor(s). The Monitor is under contractual obligation to treat the information and documents of the Bidder(s)/ Contractor(s) / Sub-contractor(s) with confidentiality in line with Non- disclosure agreement.

8.4 The Principal will provide to the Monitor sufficient information about all meetings among the parties related to the contract provided such meetings could have an impact on the contractual relations between the Principal and the Contractor. The parties offer to the Monitor the option to participate in such meetings.

8.5 The role of IEMs is advisory, would not be legally binding and it is restricted to resolving issues raised by an intending bidder regarding any aspect of the tender which allegedly restricts competition or bias towards some bidders. At the same time, it must be understood that IEMs are not consultants to the Management. Their role is independent in nature and the advice once tendered would not be subject to review at the request of the organization.

8.6 For ensuring the desired transparency and objectivity in dealing with the complaints arising out of any tendering process, the matter should be examined by the full panel of IEMs jointly as far as possible, who would look into the records, conduct an investigation, and submit their joint recommendations to the Management.

8.7 The IEMs would examine all complaints received by them and give their recommendations/ views to CMD, BHEL, at the earliest. They may also send their report directly to the CVO and the Commission, in case of suspicion of serious irregularities requiring legal/ administrative action. IEMs will tender their advice on the complaints within 10 days as far as possible.

8.8 The CMD, BHEL shall decide the compensation to be paid to the Monitor and its terms and conditions.

8.9 IEM should examine the process integrity; they are not expected to concern themselves with fixing of responsibility of officers. Complaints alleging mala fide on the part of any officer of the organization should be looked into by the CVO of the concerned organisation.

8.10 If the Monitor has reported to the CMD, BHEL, a substantiated suspicion of an offence under relevant Indian Penal Code/ Prevention of Corruption Act, and the CMD, BHEL has not, within reasonable time, taken visible action to proceed against such offence or reported it to the Vigilance Office, the Monitor may also transmit this information directly to the Central Vigilance Commissioner, Government of India.

8.11 The number of Independent External Monitor(s) shall be decided by the CMD, BHEL.

8.12 The word 'Monitor' would include both singular and plural.

Section 9 - Pact Duration

9.1 This Pact shall be operative from the date IP is signed by both the parties till the final completion of contract for successful bidder and for all other bidders 6 months after the contract has been awarded. Issues like warranty / guarantee etc. should be outside the purview of IEMs.

9.2 If any claim is made/ lodged during currency of IP, the same shall be binding and continue to be valid despite the lapse of this pact as specified above, unless it is discharged/ determined by the CMD, BHEL.

Section 10 - Other Provisions

10.1 This agreement is subject to Indian Laws and jurisdiction shall be registered office of the Principal, i.e. New Delhi.

10.2 Changes and supplements as well as termination notices need to be made in writing. Side agreements have not been made.

10.3 If the Contractor is a partnership or a consortium, this agreement must be signed by all partners or consortium members.

10.4 Should one or several provisions of this agreement turn out to be invalid, the remainder of this agreement remains valid. In this case, the parties will strive to come to an agreement to their original intentions.

10.5 Only those bidders / contractors who have entered into this agreement with the Principal would be competent to participate in the bidding. In other words, entering into this agreement would be a preliminary qualification.

For & On behalf of the Principal

(Office Seal)

For & On behalf of the Bidder/ Contractor

(Office Seal)

Place-----

Date-----

Witness: _____

(Name & Address) _____

Witness: _____

(Name & Address) _____